VOLUME LXVIII JULY, 1911 No. 1

AMERICAN JOURNAL OF INSANITY

THE CARE AND TREATMENT OF THE INSANE IN THE STATE OF NEW YORK.*

BY CHARLES W. PILGRIM, M. D.,

Superintendent Hudson River State Hospital, Poughkeepsie, N. Y.

First of all, gentlemen, I want to thank you for the honor which you conferred upon me when you made me your President, for I consider that the election to the presidency of this Association is the highest honor that can come to anyone in our specialty.

Since my election my moods have varied. At first, like everyone who has ever filled this office, I determined that I would take time by the forelock and prepare this address at once, but alas, like most good intentions, my resolution came to naught, and days, weeks and months flew by without the writing of a line, until at last, when delay could no longer be permitted, I prepared this address, which, with feelings of humility at its inadequacy, I now present for your consideration.

In casting about for a subject it seemed to me that everything conceivable had been written upon by my worthy predecessors, and in despair at last I decided upon the subject which is the most familiar to me, viz.: "The Care and Treatment of the Insane in the State of New York."

Sixty-seven years ago when the memorable thirteen met in Philadelphia to organize the Society of which we are now the proud members, there was in the State of New York but one public institution for the care of the insane. That was the City Asylum which was opened in 1839. In addition there were three private institutions. Bloomingdale, the oldest of all, which is a part of the New York Hospital, received its first mental cases in May, 1797, when two cases of mania were admitted to the general

*President's annual address at the sixty-seventh annual meeting of the American Medico-Psychological Association, Denver, Col., June 19-22, 1911.

VOLUME LXVIII JULY, 1911 No. 1

AMERICAN JOURNAL OF INSANITY

THE CARE AND TREATMENT OF THE INSANE IN THE STATE OF NEW YORK.*

By CHARLES W. PILGRIM, M. D.,

Superintendent Hudson River State Hospital, Poughkeepsie, N. Y.

First of all, gentlemen, I want to thank you for the honor which you conferred upon me when you made me your President, for I consider that the election to the presidency of this Association is the highest honor that can come to anyone in our specialty.

Since my election my moods have varied. At first, like everyone who has ever filled this office, I determined that I would take time by the forelock and prepare this address at once, but alas, like most good intentions, my resolution came to naught, and days, weeks and months flew by without the writing of a line, until at last, when delay could no longer be permitted, I prepared this address, which, with feelings of humility at its inadequacy, I now present for your consideration.

In casting about for a subject it seemed to me that everything conceivable had been written upon by my worthy predecessors, and in despair at last I decided upon the subject which is the most familiar to me, viz.: "The Care and Treatment of the Insane in the State of New York."

Sixty-seven years ago when the memorable thirteen met in Philadelphia to organize the Society of which we are now the proud members, there was in the State of New York but one public institution for the care of the insane. That was the City Asylum which was opened in 1839. In addition there were three private institutions. Bloomingdale, the oldest of all, which is a part of the New York Hospital, received its first mental cases in May, 1797, when two cases of mania were admitted to the general

*President's annual address at the sixty-seventh annual meeting of the American Medico-Psychological Association, Denver, Col., June 19-22, 1911.

wards. This is the first record known of the treatment of insanity in the State of New York, although it is probable that one or two cases had been previously cared for in this hospital. In the following month seven more cases were admitted. By the end of the year 1803, 215 cases had been treated, when as the records state, "influenced by the multiform annoyances and disadvantages to both classes of patients, necessarily attendant upon placing lunatics and patients with general diseases in the same building, the Board of Governors resolved to erect a separate building to be exclusively devoted to persons laboring under mental disorder." We thus see how "history repeats itself," for the methods which were considered undesirable more than a century ago are now being advocated by many of the leaders in psychiatry throughout the world.

This separate building which was within the same enclosure as the general hospital was opened in 1808, but after ten years' experience, the Board of Governors decided that a still further separation was essential for the judicious treatment of insanity, and a farm on the outskirts of the city was purchased, where, under the name of the Bloomingdale Asylum, the new institution was opened for the reception of patients in June, 1821.

In 1845, which for statistical purposes, is the year with which I shall start, there was but one State institution for the care of the insane in the State of New York, the Utica State Lunatic Asylum, which was opened in 1843. There were, at this time, in the Utica institution, the City Asylum, Bloomingdale, and the private institutions conducted by Dr. White at Hudson, and Dr. James MacDonald in New York (afterward known as Sanford Hall), but 763 patients. The census of the State for that year was 2,604,495, which gives a ratio of one committed insane to every 3,413 of the population, which is in marked contrast with the census for 1910, which shows a proportion of one insane person to every 278 of the population.

As has been stated, the Utica State Hospital was opened in 1843, and the first attempt at State care was thus inaugurated. In 1855, after it had been in operation for twelve years, it had a population of 294 patients and there were in addition 1352 pauper patients in the 53 poorhouses of the State. The insane had for a long time been cared for to a greater or lesser extent in the poor-

houses of the State, but owing to the necessity for transfers from the Utica hospital the number gradually increased. In 1855 it became apparent that there was great necessity for improved care and increased accommodation, and the Superintendents of the Poor at a conference held in Utica gave expression to their views and appointed a committee to memorialize the legislature and petition for action. The legislature appointed a committee which spent five months in investigating, and the result was a painstaking report which recommended the establishment of two institutions. Their efforts failed, however, so far as providing for the insane in poorhouses, but the recommendation for the establishment of an institution for insane convicts was approved and the Auburn Asylum was opened in 1859. In 1864 further concerted effort was made for improved care for the insane in poorhouses, and the State Medical Society appointed a committee of which Dr. Sylvester D. Willard was the most active member. Due to the efforts of this committee the bill establishing the Willard Asylum was passed April 8, 1865. Of the trials and tribulations which beset the establishment of this hospital it is not my intention to speak, as Dr. Chapin has already written of them in a masterly manner.

The next hospital opened was that at Poughkeepsie, known as the Hudson River State Hospital for the Insane, where the first patients were received in 1871. Unlike Willard, which was established to care for the chronic and poor in the county houses, that at Poughkeepsie was intended for the treatment of the acute and was planned upon a most elaborate scale. It was the first to use the name hospital instead of asylum, a custom which has since become well nigh universal. The elaborate plans and costliness of the buildings resulted in much criticism which it took years to overcome. But those who know the needs of the insane know that the buildings as originally planned, with ample space for classification were much better adapted to the proper care of the insane than are the buildings of the present day with their large dormitories, congregate dining-rooms, and limited per capita space.

After Poughkeepsie came the Middletown Homeopathic Hospital which was opened in 1874, and that was followed by the opening of the Buffalo institution in 1880.

In looking over the list of men who were identified with these institutions in their early days we find such names as Pliny Earle and Nichols at Bloomingdale, Brigham, Benedict and Gray at Utica, Chapin and Wise at Willard, Cleaveland at Poughkeepsie, Talcott at Middletown, and Andrews at Buffalo, all but one having now joined the great majority. These pioneers in the work had many difficulties to overcome, and an examination of their reports and writings shows that they met them manfully and in the majority of instances mastered them well. In my estimation time cannot be better spent, especially by our younger confrères, than in reading the essays and reports which show the trials and triumphs of the early workers in our chosen field. Well pleased as we are with the achievements of the recent past we are apt to forget the efforts of our predecessors, but an impartial examination of their work tells a story of difficulties met and overcome, and of high ideals often attained under tremendous opposition and discouragements, and none of us need be ashamed to say:

"I with uncovered head
Salute the sacred dead."

Owing to the demand for increased accommodations and to the inability of the Willard Asylum to care for the increasing number of chronic insane, the Binghamton Asylum, which had formerly been unsuccessfully conducted as an inebriate asylum, was opened in 1881 as an institution for the care of the chronic class.

For the next decade the insane continued to be cared for in the following manner:

1st. The acute and curable cases in the State institutions at Utica, Buffalo and Poughkeepsie.

2d. Those needing custodial care in the asylums at Willard and Binghamton.

3d. The incurables and hopeless in the county houses.

4th. The criminals in the asylum at Auburn.

Owing to the inability of caring for all recent cases in the State institutions for the curable class the superintendents of these hospitals were permitted at the end of a year to transfer to the county asylums cases supposedly incurable. This inhumane provision naturally led to the accumulation in the county houses of a large number of violent, filthy and helpless cases, just the

kind that need the most attention and the greatest care. In addition, the practice of admitting into the county asylums recent and presumably recoverable cases had grown up, and probably many who by proper medical treatment could have been restored to a life of usefulness were doomed to "a living death."

Sentiment against the abuses inevitably connected with such conditions had been steadily growing for some time under the fostering care of the State Charities Aid Association, an unselfish body of voluntary workers, and as a result the State Commission in Lunacy was established in 1889.

A single headed commission had previously been appointed by Gov. Hoffman in consequence of the publication in 1872 of a book called "A Mad World and Its Inhabitants," written by a newspaper reporter named Chambers, professing to expose alleged abuses in Bloomingdale, but the powers of this Commissioner were so limited that but few changes in existing conditions were made. The Commission established in 1889, consisted of three members with greatly increased powers, and as originally organized by Governor Hill, combined in a most effective way unusual medical, legal and business abilities, and succeeded, despite most bitter opposition, in putting the State Care Act, which was passed in 1890, in successful operation, all of which has been so well told by Dr. MacDonald in his able address before the International Congress in Amsterdam that it is unnecessary for me to repeat it here. It should, however, be noted that the Commission succeeded in abolishing entirely and forever county care, and its grave abuses, from the State of New York.

At this time (1890) the St. Lawrence State Hospital was opened, and later the county institutions at Rochester (1891) and New York City (1895), which were at first not included in State care, were taken over by the State and not only the supervision but the cost of caring for all the dependent insane was assumed by the State on the 28th day of February, 1896,

In 1898 the State Homeopathic Hospital at Gowanda was opened and in 1900 the Dannemora State Hospital, for the care of male convicts declared insane while serving a sentence for felony, was established. In 1910 the Mohansic State Hospital near Peekskill was organized, but as yet there are no accommodations, aside from a few farm houses, for the care of the insane,

It will thus be seen that provision for the large annual increase has practically been made during the past twenty years by additions to the existing institutions.

Having thus hastily sketched the growth of the care of the insane in the State of New York I will now, as briefly, refer to our existing conditions and methods, with their merits and defects.

On October 1st, 1910, there were in the various institutions of the State 32,657 insane. In 1890 there were in the almshouses and hospitals but 16,006. We thus see that there was a recorded increase of 104 per cent in the insane population during the twenty years mentioned while the general population increased but 52 per cent during the same period. The recent investigations of Dr. Searcy show similar results in the South. In Alabama the increase in admissions to hospitals for the insane during the past ten years was 45 per cent while during the same time the population of the State increased but 16 per cent. Wherever careful investigations have been made similar conditions have been shown to exist throughout the civilized countries of the world. I think, therefore, that it is time for us to acknowledge that insanity is increasing much faster than the general population, and that we have been mistaken in attributing the apparent increase solely to the better appreciation of institutional care and the resultant accumulation of cases. I know that this old and flattering explanation is still adhered to by many of our members, but I also know that it is not satisfactory to many others who have carefully investigated the subject. Among the latter I may mention Mr. Frederick Hoffman, one of the most competent statisticians in the country, who is satisfied from his recent investigations that there is an actual and demonstrable increase not only in insanity, but in crime and suicide as well.

In New York the number of insane is greatly augmented by the constant arrival of unfit aliens. More than 45 per cent of all our cases are of foreign birth, while the ratio at large in the State is but 35 per cent. The remedy for this, of course, lies in stricter immigration laws. While all will agree that this country should continue to be a haven of rest for the oppressed of other lands, our welfare demands that only the healthy, willing and industrious should be admitted. That a great deal in the way of exclusion has been accomplished is shown by the fact that 24,000 immigrants

were deported as undesirable during the past year and fully four times as many were prevented from sailing after a medical examination at foreign ports, but the large number of foreign born who occupy the wards of our hospitals for the insane show that still greater care and stricter laws are needed.

Much of the increase is also caused by "the pace that kills" due to the tension of American life, and alcoholic and other excesses. In at least 15 per cent of all cases the excessive use of alcohol is undoubtedly a direct cause, while in more than 40 per cent it may be considered as an etiological factor of more or less importance. When we add to the 15 per cent caused by alcohol an equal number caused by sexual excesses, syphilis and drugs, we see that nearly one-third of all our cases have been brought on by preventable causes. In the sexes these causes are in the proportion of two to one for men and women. As an outgrowth of the "After Care Association" there has recently been formed by the State Charities Aid Association, an association known as the "Committee on Mental Hygiene," which is to undertake the task of educating the public in regard to the prevention of insanity much as has been done in the campaign against tuberculosis. While this work will probably be slow, if persisted in in a systematic way, it will undoubtedly be productive of good results, for it is but natural to suppose that some, at least, will take heed when they have pointed out to them "the way that madness lies." The recently awakened interest in the study of eugenics is also to be commended, and it is to be hoped that at no distant day a broad and reasonable law will be upon the statute books of all the States permitting the sterilization of defectives.

Something may also be done by encouraging the formation of correct mental habits in youth, and by securing healthful surroundings in homes and factories for the toiling masses. But the millenium is far off and despite our best efforts the insane, like the poor, will be always with us, and the State owes them a duty which it should fulfil in no niggardly fashion. There is no other disease which creates so much distress and which is so far reaching in its effects. Those who are stricken have generally been wage earners and self-supporting citizens and many have been tax-payers and contributors to the general pros-

perity of the State. And while it must be admitted that the financial burden is a heavy one indeed, it must also be admitted that the claims of suffering humanity take precedence over all else, and the State should share their need promptly and with proper generosity. Skilled medical attendance, comfortable housing, intelligent nursing, substantial and nourishing food, and suitable clothing are their due, and it should be our constant effort to make legislators understand these needs and to realize the duty of the State towards its helpless wards.

And now let us see how these conditions have been met in the Empire State.

In the first place skilled and experienced medical attendance is assured by the Civil Service laws which have been impartially administered for the past twenty years. Entrance into the service and promotion to the various advanced grades depend solely upon record, experience, and written examinations. Political influence has no weight whatever in appointments or promotions. The great difficulty under which we now labor is that of getting suitable candidates to take the entrance examination, despite the fact that, under the wise direction of Drs. Meyer and Hoch, psychiatry in New York State has gained a remarkable impetus, and in no other field can the student find larger opportunities or greater interest.

The manner in which cases are studied in our State Hospitals, the way in which case records are kept, and the manner in which material is presented at the regular staff meetings, are worthy of the highest commendation, and experience in general hospitals, both at home and abroad, leads me to the firm conviction that in no other branch of medicine is better or more conscientious work being done.

It is often said that we make but few cures in insanity. While admitting that Pliny Earle's dictum, "if insanity is to be diminished it must be by prevention and not by cure," is largely true, it is no more true of insanity than of other formidable diseases. An examination of statistics carefully and conscientiously prepared under the direction of the New York State Commission in Lunacy, shows that nearly twenty-five per cent of all who are admitted to hospitals for the insane throughout the State are either permanently cured or improved to such an

extent as to be able to again take up their positions in the world and enter into the enjoyments of business and social life. From 15 to 20 per cent. more are returned to their homes in a condition to live in the outside world without violating the ordinary rules of conduct, and more than 70 per cent of those who are obliged to spend their lives under institutional care are taught to do some useful work and, in many instances, lead contented lives. It should be remembered that these figures represent only hospital cases which necessarily include the most advanced and hopeless ones. A much better showing would be made if our statistics were to include the large number of cases treated outside of institutions for the insane. An inquiry instituted by the Massachusetts Board of Insanity * in 1904 showed that 685 physicians of that commonwealth had treated 2428 cases of mental disease during that year and that only 55 per cent had been committed to hospitals for the insane, while the remaining 45 per cent had been treated at home, or at least outside of institutions for the insane. Similar conditions undoubtedly prevail in other states and should lead us to take a less hopeless view than is usually taken in regard to the curability of mental diseases.

I believe that our work will favorably compare with that of workers in any other branch of medicine, and although we have not conquered all the difficulties which beset us we have reason to be gratified with the scientific spirit of the day and have reason to believe that the future bears promise of rich return. But despite the advantages mentioned for ambitious medical men our institutions have become so large that the possibility of reaching the position of superintendent, or even that of first assistant, has been greatly lessened during the past decade, and the absence of facilities for the enjoyment of domestic life in the lower grades renders the work unattractive to young men of ability and ambition. The remedies in my opinion lie in making the service approximate that of the U. S. Army, by making advancement in grade depend not upon vacancies, but upon length of service and stated examinations, so that the young man who takes up the service as a life work will know just the reward that time

* Quoted by Dr. H. R. Stedman in "Popular Fallacies About Insanity."

and good service will bring him. In addition there should be a retirement age accompanied by a fair pension. There should also be provided suitable quarters and allowances for married assistants just as is done in the Army. If the conditions suggested could be brought about I have no doubt that more than an adequate number of young medical men would gladly embrace the opportunity of entering the service with the intention of making it a life work instead of using it as a stepping stone to general practice as is now so often done.

The laws in regard to the admission and discharge of patients leave no room for criticism, for they properly safeguard the interests of the patient without the publicity and accompanying objections of a jury trial. The law recently passed providing that the health officer shall assume charge of patients prior to admission will undoubtedly overcome much of the criticism heretofore made in regard to detaining patients in lockups and other improper places pending admission to the hospital.

The law providing for the admission of voluntary patients has worked well and is rapidly becoming popular. It has done much to favor early treatment and is a long step toward putting hospitals for the insane on an equal footing with those for the treatment of general diseases.

In regard to comfortable housing for the insane we have not kept pace with our needs. Every State Hospital is woefully crowded and the condition is becoming worse with every month. Efforts to provide for the annual increase, which is now more than a thousand, have, heretofore, been principally made by adding buildings to existing plants. As a result we now have huge caravansaries, with wards and dormitories containing a hundred and fifty beds and congregate dining-rooms for many hundreds. Day-rooms have been converted into dormitories and dormitories have become so crowded that, in many cases, sanitary requirements in regard to air and floor space are impossible to attain. Under such conditions the best work cannot be done, and the result is the accumulation of thousands of chronic cases under one management. All of these disadvantages I have pointed out in a paper on " The Proper Size of Hospitals for the Insane " and will not now repeat them. Some of the difficulties of huge establishments are overcome by the provision of small reception hos-

pitals such as now exist in connection with nearly all large State Hospitals, but there are many objections to these large institutions which cannot be overcome even by this expedient.

The State should provide sufficient accommodation for the care of all classes, including those who are possessed of sufficient means to pay a moderate charge. There are many who have been able to live comfortably while well, who are unable under the visitation of insanity to pay the high prices necessarily charged in private establishments. They can, however, afford and would willingly pay nine or ten dollars a week for accommodations somewhat above those which we are able to give the ordinary cases. Such cases, where the sufferers have previously been self-supporting wage earners, and have become insane through no fault of their own, have a special claim upon the State and should be provided with its care.

In Europe they do this much better than we do and all classes are cared for in State institutions in a manner appropriate to their station in life. I would not be understood as favoring class distinction, or in saying anything which would lead one to believe that I would have the State do less for its poor, but I do wish that I could say something which would make it possible to provide suitable quarters, with suitable associates, for the self-supporting, self-respecting, and correct living members of the middle class when they become insane. If provision were made in each State Hospital for this middle class I believe it would do much good, that it would elevate the tone of the whole institution, and thus indirectly benefit those who pay nothing, and that it would not create any troublesome class feeling. In fact such conditions formerly existed and the practice worked well for many years, especially at Utica. It is true that we can now charge as much as ten dollars per week for those who are able to pay that sum, but as we can offer no advantages for the extra charge it is often difficult to make those who can pay that sum understand why they should be expected to do it. Such distinctions as I suggest are made in general hospitals without causing trouble and could be made, in my opinion, with equal ease in hospitals for the insane. As only a small amount would be charged per week the State would not come in conflict with interests vested in private

establishments. This, of course, we would not expect to do until sufficient room has been provided for all of the purely charitable cases.

The cry for economy is constantly going up from legislative halls and it is proper that it should. The State should insist upon receiving full value for every dollar expended, but the "penny wise and pound foolish" policy is not to be advocated. The erection of cheap buildings which require constant repairs is foolish in the extreme, and it is equally foolish to erect good buildings and let them go to decay for lack of regular annual expenditures for repairs. The cost of buildings should not be regulated by law. Buildings for the insane should be planned to fulfil the requirements of the times and they should be economically and honestly erected. During a recent visit I found that modern institutions in Germany, with its cheap labor, and in Italy, with its slight expenditure for heating plants, cost nearly twice as much as we are allowed by law to expend in New York State. The result of our legal restrictions is that we erect cheap buildings with large dormitories, congregate dining-rooms, and a limited number of single rooms, which soon need extensive additions to meet the requirements, and in many cases, large expenditures for repairs and changes are called for almost as soon as they are put in use.

As hospitals are built for the purpose of supplying future as well as present needs it would seem that the money needed for new buildings should be raised by the issuance of bonds just as is done when other permanent improvements are made. The cost would then be spread over a series of years and would cease to be the heavy burden to the tax-payer that it has now become. Unless some such method is adopted no broad and comprehensive policy for the care of the insane can be undertaken and inadequate accommodation and makeshift methods will continue to prevail.

Intelligent nursing is now the rule. All the larger hospitals have successful and well managed training schools, under the charge of nurses trained not only in mental nursing, but in general nursing as well. The requirements for a superintendent of nurses are a diploma from a State Hospital Training School and

at least nine months training in a general hospital. These requirements have resulted in the selection of several experienced women who are now doing excellent work in the hospitals of the State. In addition there is a requirement that those who do not possess sufficient education to enter the training school, but do possess the natural intelligence to become good attendants, shall receive systematic and regular instruction in the "school for attendants." It may be fairly said, I think, that nursing, both day and night, is now on a very satisfactory basis in all our hospitals.

Substantial and nourishing food is provided for all upon a per capita allowance based upon the studies of Professors Atwater and Flint. The only criticism that can properly be made is that the dietary is not always sufficiently varied to suit individual tastes, but the employment of a skilled dietitian in many of the hospitals has done much to overcome this complaint.

Suitable clothing, supplemented in many cases by additions by friends, is supplied to all.

We thus see that in our State the principal complaint is that of lack of space, for all who know the institutions, realize that buildings have not been provided in sufficient numbers to adequately care for the net annual increase. That the insane are exceptionally well cared for from a medical and nursing standpoint, and that their needs are humanely looked after, all will admit; nevertheless the "complicated misery" known as insanity has always been, and always will be, one of the saddest afflictions of mankind, and we may all devoutly echo the pathetic prayer of Lear:

> "O let me not be mad, sweet Heaven!
> Let me not be mad!"

MEYER'S THEORY OF THE PSYCHOGENIC ORIGIN OF DEMENTIA PRÆCOX. A CRITICISM.*

By E. STANLEY ABBOT, M. D.,
Assistant Physician, McLean Hospital, Waverley, Mass.

In the various articles and reviews which Dr. Meyer has written relative to the subject of dementia præcox and in which he has developed his "dynamic interpretation" or "conception," besides undertaking to show that the disorder may be described in terms of deterioration of habits, conflicts of instincts and faulty adjustments, he has said many things that can only be interpreted to indicate a theory of the psychogenic origin of the *disease itself*, as distinguished from its manifestations or symptoms.

It is especially this part of his "dynamic conception" of which I wish to speak tonight, though I have also a few words to say of that part of his "interpretation" which deals with causes.

I was led to examine his views carefully because of his effort to approach the subject from the biological point of view, which I believe to be the most scientific and fruitful one.

I would call attention to the facts that in some of his ideas he runs counter to the prevailing conceptions of dementia præcox, and that he lays especial emphasis, rightly, on the need of sufficient observation of cases.

Stated as briefly and concisely as possible his psychogenic theory is as follows:

Dementia præcox is a disorder which is manifested by certain types of reaction which are almost pathognomonic. These types of reaction are the inevitable and natural development from a deterioration of certain habits, and this deterioration is due, partly to developmental defects of the mental endowment, but in part at least, to a clashing of instincts and to progressively faulty modes of meeting difficulties.[1] *In sufficiently well-observed cases, one invariably finds that* before the disorder appeared *the patient had*

* Read before the New York Psychiatrical Society, May 3, 1911.

[1] Psychological Clinic, Vol. 2, p. 92.

abnormal ways of dealing with the situations of life, showed an inability to get square with events, and had a tendency toward false adjustments.[3]

It follows logically that only certain personalities can get dementia præcox. Meyer does not himself directly draw this conclusion though he implies it;[3] but he allows Hoch[4] to state it, without protest so far as I have been able to discover.

The constitutional make-up which may lead to deterioration is as follows:

Perhaps exemplary childhood, but exemplary under an inadequate ideal (goody-goody); goodness and meekness rather than strength and determination; goodness in order to avoid fights and struggles; later, interest in religion, but in the ceremonial forms rather than in the essence; immature philosophizing; day dreaming; moralizing about others; irritability at home; deficient judgment; deficient ethical control; unsteadiness of occupation; inefficiency; especially loss of directive energy and initiative, without obvious cause (such as illness); disconnected thoughts; unaccountable whims; seclusiveness; sensitiveness to allusions to health, pleasures, etc.; hypochondriacal complaints regarding the heart, etc.; headaches, freaky appetite, general malaise, and other physical symptoms. Often there are precocious abnormal sexual practices. Some of those traits may not appear till puberty, and all may be transient.[5]

Such organic changes, or evidences of toxæmia as may be found, Meyer regards as incidental, and secondary to, perhaps even caused by, these conflicts of instincts, deteriorations of habits, and inadequate psycho-biological adjustments;[6] they are not a cause of these manifestations, though they may be of some of the later symptoms.

Thus Meyer's conception of dementia præcox is essentially a functional one, and in his advocacy of his psychogenetic theory he inveighs rather strongly against those who regard the condition as possibly or probably having some toxic or organic process back

[3] Jour. of Nervous and Mental Diseases, Vol. 34, p. 332.
[3] Am. Jour. Psychology, Vol. 21, p. 395.
[4] Rev. of Neurol. and Psychiat., Vol. 8, p. 465.
[5] Am. Jour. Psychology, Vol. 14, p. 102.
[6] Jour. Abnorm. Psychology, Vol. 5, pp. 276, 280.

of it, or who apply to it the "paradigm of general paralysis." He thus stands practically alone, and reverses the general tendency of medical science to take morbid conditions out of the functional class and put them into the organic. It seems like a step backward, and his evidence should be very strong in order to be convincing.

This is especially true since we see many conditions in which conflicting instincts and ineffective or even harmful adjustments do *not* lead to deterioration. For example, reactions which can be described in such terms as he uses occur often in hysteria, neurasthenia, psychasthenia, hypochondriasis, feeble-mindedness, dense ignorance, among the superstitious, among those who segregate themselves in monasteries and nunneries, among those of the so-called artistic temperament, not to mention such mental diseases as manic-depressive psychosis. Also we find in a large percentage of all persons, sane as well as insane, *some* of the traits which he has described as belonging to the make-up which may lead to deterioration.

Hence he should show conclusively by his cases, not that the pre-psychotic make-up manifested *all* of the traits or habits indicated, but enough of them to dominate the personality. His cases should also show the dementia præcox reactions to be the evident consequences of the special clashing of instincts and progressively faulty modes of meeting difficulties manifested *habitually* by the patient before the psychosis developed.

It is not sufficient to show that the patient had such and such traits, and afterward had a typical dementia præcox.

Do his reported cases meet these requirements?

Of his most fully reported cases, ten appear in some detail in three different papers; four of these give quite inadequate details as to make-up. For example,[1] a young man, said to have masturbated early and to have been bright at school and in his early environment, goes to New York from the South at 22. He then failed to make friends, became morose, morbid, seclusive, lost his position, sought quack treatment for sexual neurasthenia. About two years of such behavior culminated in a tantrum, ideas of influence, later idleness, seclusiveness, then negativistic stupor.

In this case almost nothing is said of the constitutional make-up;

[1] Am. Jour. Psychology, Vol. 21, p. 396.

a comparatively sudden change of reaction-type appeared coincident with a change in environment, this change in behavior marking the beginning of the psychosis. It is not shown that the morbid reactions are the natural evolutions of previous traits. It is evident that some other cause than make-up must be looked for to explain the psychosis.

Of the remaining six cases, three are derived from Hoch's material,[8] and are not inconsistent with the theory. But on the other hand, neither they nor the other cases cited, exclude the possibility or even probability of there being some other factor or factors at work also.

The other three cases are his own. The time limit does not permit a discussion of each one, but it may fairly be said that only a few of the reaction-types described in the developed psychosis are the logical evolution of the traits described in the make-up. One case in point may be referred to.

A woman of 33 or over, married at 23,[9] is described as rather perverse and stubborn, with outbursts of temper as a child, efficient as dressmaker, and later as wife and housekeeper, of strong maternal instincts, but sterile, and very jealous of her husband, a rather inferior man. After unsuccessful operations to correct sterility, being run down from a septic finger, and being told she could never have children, she was much upset, later developed delusions of multiple pregnancies, of being operated on, of conspiracy, of her husband's unfaithfulness, and later of grandeur and high rank, with elaborate systematizations. She continued industrious, orderly and coherent. Here the reactions are determinated in their outward aspect chiefly by *experiences* (sterility, operations, disappointments) rather than by *make-up* (stubbornness, perversity, jealousy, efficiency). Habitual faulty adjustments, deteriorations of habits, conflicts of instincts cannot be considered the cause, much less the sole cause, of a change in reaction-type coming on first at the age of 33. Again some other cause or causes must be looked for.

In his discussion of this as of his other cases, Meyer shows constantly a tendency to confine his attention largely to the psy-

[8] Psychol. Clinic, Vol. 2, pp. 99-100.
[9] Am. Jour. Psychology, Vol. 21, p. 391.

chical elements, even leaning toward a Freudian manner of interpretation, and to rather overlook the physical elements. He thus takes really a psycho-biological attitude towards the problem, and not a broadly biological one (which includes the other).

Thus it is seen that his own cases fail to show the causal relation between the make-up and the reaction-types in dementia præcox that his theory calls for.

Furthermore there are many cases of dementia præcox, well observed, in whose antecedents no such predominating characteristics were present. An example is that of a boy of 21, college student, of good heredity, a good student, fond of athletics, as much a leader as led, not a dreamer, interested in external things, not introspective, fond of society, efficient, captain of his school regiment, popular, ready to take responsibility, meeting emergencies easily and well, normally but not morbidly interested in church work, secretary of his Sunday School organization, considerate of others, manly and direct, in no way peculiar; had grippe, became depressed, then became blocked, had sudden amnesias, feeling that he couldn't remember, then wandered off, had scattered thinking, typical catatonia, mutism, flexibility, etc., and grew much demented.

Thus it is *not* true that where all the facts are available one *invariably* finds in the antecedents abnormal ways of dealing with the situations of life.

While it is an interesting and possibly significant fact (though of what it is significant we do not yet know) that in the personality of dementia præcox cases before the onset of the illness, such traits are found in a somewhat larger precentage than in manic-depressive cases, for example, yet the proportion is not so great as to make it a fair inference that more careful inquiry would show them in all cases.

Also, analysis of Meyer's own cases, so far as the facts are available, shows that even when such dominating traits are present, it is not necessarily those traits that determine the *morbid* reactions, though naturally they would be found to determine some of them.

To sum up, Meyer takes a psycho-biological, not broadly biological view-point.

More than half his own most fully cited cases are inadequately reported (though they may have been well-observed).

His own cases fail to demonstrate

1. That the antecedents *invariably* show inefficient habits of adjustment; and

2. That the reaction-types shown in the developed psychosis are the necessary developments of the make-up; and they do demonstrate

3. That, when present, the traits do not necessarily determine the reaction-types of the developed psychosis.

Cases are too frequent in which in the pre-psychotic stage no morbid traits dominate the personality, to render it likely that further studies will show them to be an insignificant proportion of all cases.

Hence his evidence is not strong enough to carry the conviction that we should give up the organic conception in favor of the functional.

More than this, he has not shown that organic changes of some sort may not be the causes, or among the causes, of the origin of the psychosis. We all admit that such have not been proved or found, though to most of us it seems probable that in time they will be; and we shall keep on looking for them. For Meyer's developmental theory, while possibly accounting in part for some of the insidiously arising and slowly progressing cases of the hebephrenic type, does not explain the rather sudden and marked changes in behavior in almost all other cases, and does not *completely* explain even them.

If, then, Meyer has not fully upheld his theses that certain personalities lead to dementia and that only certain personalities can get dementia præcox, he has nevertheless pointed out and emphasized the derivation of certain reactions from past experiences. Though not always keeping clearly in mind the distinction between constitution and experiences, he has rightly insisted on seeking as complete knowledge as possible of both, since they are essential, if not to diagnosis at least to the most helpful treatment.

A few words as to his dynamic conception:

It should be noted that he does not believe in a disease entity, but seems to regard dementia præcox as a sum, or collocation in one individual, of certain types of reaction, or kinds of behavior.

It is precisely because he has turned away from the disease concept—the "paradigm of general paralysis"—that he has felt the necessity of explaining on constitutional or habit grounds why these special types of reaction are grouped so often in certain cases, and that he has had to invent this psychogenic theory which his own reported cases fail to support.

It is also precisely because he has turned away from the disease concept that the *individual reaction-type* rather than the whole psychosis, assumes so great an importance in his eyes, and that he turns to psychic causes alone for his explanation of it.

I would not be misunderstood as attaching no value to mental factors. Far from it. I am a firm believer in the dynamic value of psychic factors in the reactions of all individuals, well or ill. But they are not the only factors, nor do they always or completely explain the *changes* of reaction-type, whether of degree or of kind, which we see in all mental disorders. By keeping to the conception of a disease entity, with open mind as to what "may be back of it" till demonstration has become conclusive, we shall avoid the danger of overlooking important factors which may have causal value in the production of mental diseases.

A comprehensive dynamic conception based on broad biological grounds would regard each act of the individual as what one might call the resultant of a parallelogram of forces, or rather of a system of parallelograms or a polygon of forces. Our problems are to discover *all* of these forces that we can. Furthermore, in comparing the acts of the patient with what his acts under similar conditions would have been had he been well (which is the only true criterion for that patient), we will find that some forces are *lacking* that normally would have entered into the resultant act. In cases of dementia præcox, almost more important than the forces that are present, are the forces which ought to be there but are not, in the production of the reaction-types. Important problems therefore are, what forces are absent, and why are they absent?

In seeking for the answers we cannot safely ignore the brain, without which no psychical activity whatever is possible. The anatomy and physiology, let alone the chemistry, of the brain are still too little known to help us much with its pathology. Yet we do know *something* of these, and the fact that we do not know

more need not deter us from suspecting and searching for some deviation from the normal, especially some destruction, when we note clinically certain permanent absences of psychical activity which is normally present. The hypothetical or *a priori* grounds for positing psychical mal-adjustments as causes of destructive brain-changes are far less tenable than those of the reverse proposition.

In turning away then from the "paradigm of general paralysis," Meyer loses something of value, and turns his back to certain avenues of investigation. It is well known that the brain-changes in general paralysis do not account for all the reactions of the paretic—his euphoria, his grandiose ideas, his elisions of letters and words in writing, etc. It should be equally obvious that the organic changes back of it, whatever they may be, do not account for all the reactions of the dementia præcox case. But since in the latter case the organic changes are less destructive, even more reactions will be determined by other causes—some by the factors which Meyer rightly insists on (make-up, instincts, habits and experiences) but others also by the environment, past and present, and by the patient's comprehension of it; by his general capacity; by his aims, ambitions and purposes; by his education and training. We must remember that causes are multiple, and so we need to search diligently, not only in the directions Meyer has indicated, but in these others, including all possible organic changes, as well. If he has laid too much stress on the make-up and habitual reactions, it is because he has felt that others neglected them and laid too much stress on organic processes. He has only pushed the pendulum too far to the other side, and claimed too much for mere habit deteriorations, conflicting instincts, and false adjustments.

THE CEREBRO-SPINAL FLUID; ITS CELLULAR ELEMENTS AND GLOBULIN CONTENT.*

By FREDERIC J. FARNELL, M. D., Butler Hospital Laboratory, Providence, R. I.

The study of the cerebro-spinal fluid is a comparatively recent addition to the clinical analysis of many pathological processes occurring in the central nervous system. How the neurons of the cerebro-spinal system are nourished and the origin of the fluids as to whether it is an excretion or a secretion is not considered in this paper. But it is well known to all physiologists that its physical and chemical characteristics are different from those of any other body fluid and that these physical and chemical properties are altered materially in many diseases of the central nervous system.

In 1909 Noguchi and Moore while studying the biological and bio-chemical properties at play in the Wassermann reaction observed that there was another property in spinal fluids and blood sera, which was altered in amount, namely, the globulin content, to which they ascribed the name Euglobulin. After carrying out tests on a number of cases of varying types of syphilitic and non-syphilitic disease, they came to the conclusion that there was some parallelism between the cytological count and the globulin content and that the latter was a reliable index.

Normal spinal fluid is clear, like water, has a low specific gravity of 1.005 to 1.006, is alkaline and usually devoid of corpuscular elements, although occasionally a cell can be found in five cc. of fluid. The albumin present in normal fluids is very small, but can be elicited by heating.

The material included in this report is based upon the study of such cases as came under observation in the Manhattan State Hospital during the course of a year. Two hundred cases have been examined and the diagnoses given are those accepted after the patient had been under observation from two to three months and all facts obtained as far as possible to make the diagnosis

* From the laboratory of the Manhattan State Hospital, Ward's Island, N. Y.

fairly certain. It may be that the series is comparatively small but the results are such as to warrant this publication.

The technic adopted for the examination of the cells was the use of the French 3-drop method, with an attempt to make the drops of uniform size, but which, though only partially satisfactory, has proven no grave drawback. After centrifugalization for twenty minutes at about 2000 revolutions per minute, the supernatant fluid poured off and the sediment collected in a small hair pipette, was blown into three drops on a slide. They were stained with either Ehrlich's Triacid or Hastings' stain. It was only in very few cases that a differentiation of the types of cells could be made out. The examination was made with a 1/12 lens and a No. 1 eye-piece.

An average count of 20 fields was taken.

Various methods have been employed for the determination of the globulin content. Nonne's saturated ammonium sulphate tests have proven very valuable. Ross and Jones' nitric acid contact test has met with good results. But probably the better and more consistent results have been obtained by Noguchi's butyric acid test which has been employed in this study. The original technic is as follows: One part of cerebro-spinal fluid (0.2 cc.) to which is added five parts (0.5 cc.) of a 10% solution of butyric acid in physiological salt solution; the resultant mixture heated and boiled for a short period of time. Then, one part (0.1 cc.) of normal sodium hydroxide is added quickly and the mixture again heated. The presence of increased globulin is indicated by a granular or floccular precipitate which settles beneath a clear supernatant fluid. The rapidity and intensity of the reaction varies according to the quantity of globulin—the greater the amount of globulin, the quicker the reaction. The period of precipitation is limited to two hours. Normal fluids either give no reaction observable to the eye or become merely opalescent.

In order that the relative value of these findings may help, if possible, the differentiation of various types of organic disease, and also between organic and functional psychoses, it is advisable to place the cases in groups which have similar clinical characteristics.

Table No. I includes general paralysis, tabes dorsalis and cerebral syphilis. A glance will show that the chief characteristics are lymphocytosis and increase in globulin. In only one case (No.

23) was the cellular element and globulin negative, at the same time the physical and mental state was typically paretic. One case of tabes dorsalis (No. 18) gave a negative globulin reaction. Eight cases of paresis (Nos. 10, 12, 14, 17, 23, 39, 49, 54) gave a negative globulin with relatively small lymphocyte count in six of them. It might be stated here that in the writer's experience the cases which showed the high lymphocyte count showed a rapid and intense globulin reaction. Many of these cases were punctured more than once and invariably the cellular elements and the globulin contents showed increase. Two cases of cerebral syphilis (Nos. 44, 49), gave a small lymphocyte count and a positive globulin in one (No. 44) and a negative globulin in the other (No. 49). One case of hereditary syphilis gave positive findings throughout.

Table No. II shows several other types of nervous affections: One case (No. 82) of spastic paraplegia gave a moderate lymphocytosis but a negative globulin. One case (No. 83) of multiple sclerosis was positive throughout. A tumor of the corpus callosum (No. 84) gave a lymphocytosis but no increase in globulin. Of three cases of motor aphasia (Nos. 85 to 87), one (No. 86) showed a moderate increase in lymphocytes and a positive globulin; the other two, negative proteid content but a mild lymphocytosis in one. Two cases of cerebral hemorrhage (Nos. 88, 89) showed a low cellular count, a positive globulin in one and negative in the other. Eight cases of Korsakoff's syndrome (Nos. 90 to 97), showed a negative proteid content and an exceedingly low cellular increase in two, normal in four. One case of blastomycotic meningitis (No. 98) gave positive findings throughout.

Table No. III shows 32 cases of idiopathic epilepsy in which the family history was thoroughly investigated in order that syphilitic disease might be ruled out. The globulin content was negative in all cases. The fluid was normal in four (Nos. 127 to 130) whereas in the remainder the cell count varied from 2 to 15 cells increase. The frequency and severity of convulsions appear to bear no relation whatever to the higher counts. In only two or three did the puncture decrease the number of convulsions temporarily.

Table No. IV shows various types of functional mental states in which a physical sign or previous history warranted a lumbar

puncture. Two cases of manic depressive psychosis (Nos. 133 and 136) gave a positive globulin and an increase in lymphocytes. Case No. 133 suffered from a manic attack before marriage; married a syphilitic man who died of paresis; then had another manic attack with recovery. Finally a third manic attack in which the above findings were elicted. Case No. 136 suggested a paretic process without physical signs. Three other cases (Nos. 134, 142 and 146) show a moderate lymphocytosis. In the dementia præcox group the globulin was negative in all but three (Nos. 156, 158, 159) and the lymphocytes varied from normal findings to as high as 60. Cases Nos. 156, 158 and 159 were exceedingly interesting—Nos. 156 and 158 were colored boys, typically dementia præcox but both had absent knee jerks. The latter also had a tubercular spondilitis but no tubercle bacilli found in the fluid and no further evidence of an active neurological process. No. 159 was a case of dementia præcox who had a chancre at the time of admission and since then has gone into advanced deterioration with an engrafted cerebral syphilis. Ten cases of acute hallucinosis showed a negative globulin and a small cellular count in all. Two cases of involution melancholia were negative throughout. Three cases of traumatic psychosis showed a negative globulin and a moderate lymphocytosis in two.

Table No. V shows five cases of senile atrophy and four cases of cerebral arteriosclerosis with a negative globulin throughout and in one senile a mild lymphocytosis; one arteriosclerotic showed slight increase and a second a considerable increase.

Table No. VI shows four cases of drug poisoning with mental aberration. Nos. 190 and 191 were cases of morphinism in which the cell count was high, the globulin positive in one and negative in the other. No. 192 was a case of cocainism negative throughout. No. 193 was a case of acetanilid poisoning in which there were varying degrees in height of lymphocytes at intervals of one month; upon the initial test the globulin was increased slightly; the later tests were distinctly negative.

Table No. VII contains five cases, three of which were punctured with the hope of aiding in the diagnosis but without any material result. One considered as imbecility showed a normal fluid; the other two were left undiagnosed. Two cases of secondary syphilis showed a moderate increase in the cellular element but the globulin was negative.

TABLE I.

Dementia Paralytica, Tabes Dorsalis, Cerebral Syphilis.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
1	25	P	Dementia Paralytica.
2	100 +	P	" "
3	30	P	" "
4	30	P	" "
5	11	P	Tabes Dorsalis.
6	30	P	Dementia Paralytica.
7	20	P	" "
8	12	P	" "
9	100 +	P	" "
10	40	N	" "
11	100 +	P	" "
12	15	N	" "
13	100 +	P	" "
14	20	N	" "
15	5	P	" "
16	100 +	P	" "
17	50	N	" "
18	10	N	Tabes Dorsalis.
19	8	N-P	Dementia Paralytica.
20	75	P	" "
21	100 +	P	" "
22	100 +	P	" "
23	Occasional.	N	" "
24	30	P	" "
25	100 +	P	" "
26	100 +	P	" "
27	12	P	" "
28	30	P	" "
29	20	N-P	" "
30	100 +	P	" "
31	100 +	P	" "
32	40	P	" "
33	100 +	P	" "
34	100 +	P	" "
35	100 +	P	" "
36	40	P	" "
37	100 +	P	" "
38	40	P	" "
39	10	N	" "
40	100 +	P	" "
41	40	P	" "
42	100 +	P	" "
43	20	P	" "
44	10	P	Cerebral Syphilis.
45	20	P	Dementia Paralytica.
46	100 +	P	" "
47	100 +	P	" "
48	100 +	P	" "
49	10	N	Cerebral Syphilis.
50	20	P	Dementia Paralytica.
51	30	P	" "
52	100 +	P	" "
53	80	P	" "
54	20	N	" "
55	80	P	" "
56	30	P	" "
57	15	P	" "
58	100 +	P	" "
59	100 +	P	" "
60	100 +	P	" "
61	100 +	P	" "
62	100 +	P	" "
63	10	P	" "
64	60	P	" "
65	24	P	" "
66	20	P	" "

TABLE I.—Continued.

Dementia Paralytica, Tabes Dorsalis, Cerebral Syphilis.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
67	100 +	P	Dementia Paralytica.
68	40	P	" "
69	75	P	" "
70	40	P	" "
71	100 +	P	" "
72	100 +	P	" "
73	12	P	Hereditary Syphilis,
74	70	P	Tabes Dorsalis.
75	100 + Poly's	P	Dementia Paralytica.
76	30	P	" "
77	40	P	" "
78	30	P	" "
79	20	P	" "
80	40	P	" "
81	20	P	" "

TABLE II.

Other Nervous Affections.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
82	18	N	Spastic Paraplegia.
83	30	P	Multiple Sclerosis.
84	15	N	Tumor Corpus Callosum.
85	11	P	Motor Aphasia.
86	25	N	" "
87	Occasional.	N	" "
88	"	N	Cerebral Apoplexy.
89	4	P	" "
90	2	N	Korsakoff Syndrome.
91	Occasional.	N	" "
92	"	N	" "
93	"	N	" "
94	2	N	" "
95	Occasional.	N	" "
96	"	N	" "
97	"	N	" "
98	10	P	Blastomycotic Meningitis.

TABLE III.

Idiopathic Epilepsy.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
99	3	N	Idiopathic Epilepsy.
100	3	N	" "
101	5	N	" "
102	2	N	" "
103	3	N	" "
104	2	N	" "
105	5	N	" "
106	10	N	" "

TABLE III.—Continued.

Idiopathic Epilepsy.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
107	13	N	Idiopathic Epilepsy.
108	3	N	" "
109	15	N	" "
110	4	N	" "
111	9	N	" "
112	6	N	" "
113	2	N	" "
114	3	N	" "
115	3	N	" "
116	2	N	" "
117	5	N	" "
118	3	N	" "
119	11	N	" "
120	6	N	" "
121	12	N	" "
122	2	N	" "
123	11	N	" "
124	2	N	" "
125	4	N	" "
126	7	N	" "
127	Occasional.	N	" "
128	"	N	" "
129	"	N	" "
130	"	N	" "

TABLE IV.

Psychoses.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
131	Occasional.	N	M. D. I. Depressed.
132	"	N	" "
133	20	P	" Manic.
134	4	N	" Depressed.
135	12	N	" "
136	15	P	" Manic.
137	Occasional.	N	" "
138	"	N	" Depressed.
139	"	N	" "
140	"	N	" "
141	"	N	" Manic.
142	4	N	" Depressed.
143	4	N	" Manic.
144	Occasional.	N	" "
145	30	P	" Depressed.
146	4	N	" Manic.
147	Occasional.	N	Recurrent Depression.
148	1	N	Dementia Præcox.
149	Occasional.	N	" "
150	"	N	" "
151	5	N	" "
152	2	N	" "
153	Occasional.	N	" "
154	3	N	" "
155	4	N	" "
156	15	P	" "
157	12	N	" "
158	30	P	" "

TABLE IV.—Continued.

Psychoses.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
159	60	P	Dementia Præcox.
160	Occasional.	N	" "
161	"	N	" "
162	"	N	" "
163	2	N	Acute Hallucinosis.
165	4	N	" "
165	3	N	" "
166	Occasional.	N	" "
167	"	N	" "
168	3	N	" "
169	Occasional.	N	" "
170	"	N	" "
171	6	N	" "
172	2	N	" "
173	Occasional.	N	Involution Melancholia.
174	"	N	" "
175	"	N	Traumatic Psychosis.
176	12	N	" "
177	7	N	" "
178	Occasional.	N	Constitutional Inferiority.
179	"	N	" "
180	6	N	" "

TABLE V.

Senile Atrophy and Cerebral Arteriosclerosis.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
181	Occasional.	N	Senile Symmetrical Atrophy.
182	"	N	" " "
183	5	N	" " "
184	Occasional.	N	" " "
185	"	N	" " "
186	3	N	Cerebral Arteriosclerosis.
187	11	N	" "
188	Occasional.	N	" "
189	"	N	" "

TABLE VI.

Drug Psychoses.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
190	18	P	Morphinism (deterioration).
191	15	N	"
192	Occasional.	N	Cocainism.
193	11	N	Acetanilidism } One month apart.
194	7	N	" }
195	3	N	" }

TABLE VII.

Miscellaneous.

Case No.	Average of 20 fields with 1-12th lens.	Globulin.	Diagnosis.
196	Occasional.	N	Imbecility.
197	"	N	?
198	4	N	?
199	6	N	Secondary Syphilis.
200	9	N	"

SUMMARY

1. The results obtained by the French method appear to show a fairly consistent increase in cells throughout this study.

2. Seventy-six cases of dementia paralytica out of seventy-seven showed a lymphocytosis. Differential counts did not aid materially towards diagnosis. One case of clinical paresis was cytologically negative. Three cases of tabes dorsalis were cytologically positive. Two cases of cerebral syphilis showed a slight increase in cells.

Ninty-three per cent of the cases of dementia paralytica gave a positive increase in globulin. One case of tabes dorsalis and one of cerebral syphilis gave a negative globulin reaction.

3. Korsakoff's psychoses show practically no increase in lymphocytes of albumin.

4. Eighty-nine per cent of the epileptics showed abnormal increase in lymphocytes, at the same time no case of epilepsy gave an increase in globulin.

5. The diagnostic value of lymphocytosis in spinal fluids in cases of manic depressive insanity and dementia præcox still remains unexplained although there is no reason why those individuals may not become infected with the syphilitic virus. The five cases which showed a positive cell count and a positive increase in globulin also gave a positive history of acquired syphilis.

6. Two of three cases of traumatic psychoses gave a lymphocytosis but a negative globulin reaction.

7. Four out of five cases of senile symmetrical atrophy gave negative results throughout.

8. Two out of four cases of cerebral arteriosclerosis of non-syphilitic genesis gave a mild lymphocytosis but a negative butryic acid reaction.

9. Morphinism and acetanilidism gave a lymphocytosis without increase in the globulin content, except in one case where there was a question of paresis.

I am indebted to the kindness of Dr. William Mabon, superintendent of Manhattan State Hospital, for the opportunity of making this study, and to Dr. George H. Kirby for his most valuable assistance and encouragement in the division of the work.

REFERENCES.

Noguchi and Moore: Journ. Exper. Med., 1909, 604.
Noguchi: "Serum Diagnosis of Syphilis," 1910 (Phila.).
Allbutt & Rolleston: "System of Medicine," Vol. VII, 1910.
Rosanoff & Wiseman: "Syphilis and Insanity," State Hosp. Bull., Vol. IV.
Nonne and Apelt: Arch. f. Psych. & Nervenheilk., 1907, XLII, 433.
Ross and Jones: British Med. Journ., 1909, 1111.
Bybee and Lorenz: Arch. Int. Med., Vol VII, 38.
Strouse: "Journ. A. M. A.," Vol. LVI, No. 16.
Kirby and Garvin; State Hosp., Bull., Vol. XI, No. 4.

THE KATATONIC SYMPTOM-COMPLEX: REPORT OF A CASE OCCURRING IN A MIDDLE-AGED MALE.[1]

By ALBERT C. BUCKLEY, A. M., M. D.,

Asst. Physician Friends Asylum for the Insane, Frankford, Philadelphia.

Since the appearance of Kahlbaum's well-known monograph in 1874 much has been written on the subject of katatonia. The bulk of the evidence furnished by the literature seems to favor the opinion that it is not a disease entity, and that it occurs as a symptom in several forms of mental disease.

The diversity of opinion concerning the subject as held by some writers of a few years ago is very apparent when one refers to the text-books of a decade ago, as representative of the teaching then prevalent. Bevan Lewis states, " The more closely we study these cases of katatonia described by Kahlbaum and other writers, the more convinced are we that we are dealing, not with any pathological entity, but with some of the multiple phases of hysteria." Clouston includes katatonia in the group of " alternating insanities." Campbell Clarke states that it is doubtful if the condition can be separated from melancholic stupor or anergic stupor. Macpherson discusses katatonia along with confusional insanity, thus, " The basis of the affection is confusional insanity (with the predominance of stuporose symptoms), various forms of which appear to occur successively in the same individual." Of the French school, Séglas and Chaslin coincide with the opinion of Bevan Lewis, that katatonia belongs to hysteria and melancholia.

In 1897, reviewing the literature, Peterson and Langdon reached the conclusion that katatonia is not an entity, not a distinct form of insanity, and, that it is simply a type of melancholia. Wernicke, in the first edition of his lectures, warns us against the use of ***melancholia attonita*** or ***melancholia cum stupore,*** " because this disease has nothing to do with the affective melancholia in our sense."

With Kraepelin's grouping of cases under the name of dementia

[1] Read at the meeting of the Philadelphia Psychiatric Society, March 11, 1910.

præcox, we now find Kahlbaum's clinical picture in the description of the katatonic variety of that disease, and corresponding closely with the melancholic attony of other writers.

The present day literature continues to furnish reports of cases which support the opinion that katatonia occurs in several disease forms. Bianchi describes it with one of the forms of his " sensory insanity " (dementia præcox) and states, " as katatonic symptoms are met not only in dementia præcox, but also in other affections, such as hysteria, melancholia, epilepsy, senile dementia, katatonia can not be a disease but rather a symptomatic complexus." J. Séglas believes that the difference of opinion depends upon the differentiation of katatonia from the katatonic state; that the symdrome is never the whole of the disease, and that it may occur in many mental states; that it is transitory in these, while when it is a part of dementia præcox, it is persistent. Serbski is unwilling to admit that katatonia belongs solely to dementia præcox, but that the signs of katatonia, automatism and negativism may be observed in many diseases.

Stadelman writes, " Sogenannte katatonische Symptomen treffen wir auch bei anderen Erkrankungen; bei Epilepsie beispielweise, und der Progressive Paralyse. Es ist nicht richtig diese Symptome als katatonische zu bezeichnen; den Worte Katatonie nach mag es wohl zulässig sein, aber nicht den Wesen der jenigen Erkrankungen." Séglas gives eleven instances in which he observed the symptoms of katatonia in general paralysis. Lugaro states, " the most obvious morbid changes (in katatonia) are found in the deepest layers of the cerebral cortex singularly rich in those elements with short axis cylinders which distribute stimuli into the substance of the cortex; possibly the spasmodic rigidity is determined by an irritative condition of these cells." With this statement before us, together with the known pathology of general paralysis, the question of katatonia would resolve itself into the matter of the particular neurones chiefly affected.

The question of the relation between thyro-toxic conditions and the katatonic variety of dementia præcox, as studied by Berkley and others, does not logically belong within the limits of this contribution. We consider it relevant, however, to note that in a recent report of the results of partial thyroidectomy in katatonic dementia præcox, Knavel and Pollock make the observation that " it is entirely possible to meet with a psychosis presenting in its

early stages the catatonia which later may be found not to belong to the adolescent group."

CASE.—The patient, a male, aged 50 years, married; a merchant at the time of the onset of the present disorder.

Family History.—Father died from wounds received in the Civil War. Mother died at the age of 83 from the effects of a "stroke." It was said that the mother, when a girl, suffered from an attack of fever, after which she passed into a state of "trance" in which she remained several days. One brother was drowned at sea; one brother died from the effects of alcohol, "probably delirium tremens."

Personal History.—The patient is the youngest of seven children. Childhood and puberty normal. At the age of 24 he had a hemorrhage from the lungs; from the effects of this he entirely recovered in two weeks.

The patient was married at 26; had three children. One died two days after birth; two are living and in good health.

At 29 years of age, while working at his trade, that of a paper-hanger, he fell the distance of three floors, sustaining injuries which kept him in bed three weeks. For about a year he was unable to work, but later was able to carry on a successful business.

Ten years ago he went South on account of "catarrhal trouble," believing that a change of climate would be of general benefit. While there he invested and lost money without any apparent effect upon his nervous health; later he re-established a business which he conducted successfully for several years.

The patient continued in good health, habits abstemious, and of a "good natured, lively disposition" until September, 1904, when he was thrown from a wagon, breaking his arm, and as the result of general injuries, was in bed three weeks.

During the following winter he was not in good health, but was able to attend to business.

December, 1906, he had an attack of pain in the left loin followed by a feeling of numbness of the left leg. He has also had several attacks of pain in the head and left side; the attacks of pain were at times associated with, or followed by, a state of stupor lasting a few moments.

In July, 1907, he had an attack of pain in the right loin, with vomiting. During one day he appeared not to recognize anyone, and did not respond when anyone spoke to him. He was said to have had other similar attacks. He complained frequently of headache.

The present condition followed an operation for renal calculus; the patient apparently got on well for three weeks, when suddenly he was seized with the following attack: When he awakened from sleep he was confused, frightened and appeared not to know where he was, and thought that he saw a negro coming into his room.

Following that attack he slept poorly, would awaken suddenly as if startled. He complained of the light, was depressed, wanted to be alone, and objected to food on the ground that it made him feel worse. This continued about four days, when he appeared to be clear mentally but was physically weaker than before the attack.

Physical Examination.—Patient is a middle aged male, of slight build, thin, poorly nourished, and physically weakened. He keeps his eyes closed during the examination, and there is a tremor of both lids. He opens the lids with marked difficulty. The conjunctivæ, corneæ and irides appear normal with no reactionary alteration. His gait is that of general weakness, and he is unable to stand with the feet together. All movements are made with great effort. The grasps were feeble in both hands. There were no palsies, contracture, or spasm; the superficial and deep reflexes were all increased, except the superficial plantar which was not obtained. The extremities were blue and cold. Sensation appeared normal, though an accurate examination could not be made on account of the difficulty of holding the patient's attention.

Case Notes.—Admitted February 17, 1908. Patient appeared in an exhausted state when he reached the ward, having walked several blocks to the hospital. When put to bed, he remained quiet, did not speak or notice anyone or pay any attention to his surroundings, lying motionless with eyes closed. When spoken to he starts as if frightened. When urged to answer in response to questions about himself, he says that he has a feeling of a heavy pressure on the top of the head. Occasionally he moans, saying, "Oh, take that weight off my head." He then promptly lapsed into a state of indifference. Later he complained that the light hurt his eyes. He appeared to have no desire for food, though he did ask for fruit. Condition remained unchanged for several days.

March 2, 1908.—Complains of noises in his head. Said that he saw a negro coming in through the window with a music box under his arm. He was confused at times, asked if he might "go riding." The following day he appeared brighter and stronger; sat up a short time; still showed mental confusion; told the nurse to take the furniture out as he intended to paper the room. During the confused state he crawled on his hands and knees out into the hall looking for someone to give him a drink.

March 10, 1908.—Suddenly showed signs of distress; got out of bed, tried to pound his head on the floor. When put in bed he had to be held in order to prevent self injury. When his excitement abated there was a continuous tossing of the head. *The arms and legs became rigid; they could not be passively flexed.* All attempts at passive motion were met with great resistance. The fists were tightly clenched. The patient does not show any external reaction to strong stimulation of a painful character. He later got out of bed again and succeeded in raising a swelling on the forehead by knocking it against the floor. When put back to bed he became noisy, calling, "Murder, help, don't let them hit me with that axe. Take those men off me." When he became quiet he lay motionless with eyes closed. When restless he frequently moans, especially when anyone approaches the bed. Temperature 100 F. (rectal); urine voided freely; bowels obstinately constipated. When visited by relatives he took no notice of them. On one occasion he spoke a few words to the nurse.

March 20, 1908.—Patient lies motionless with arms and legs extended stiffly, the jaws firmly set and the eyes closed. When an attempt is made

to flex the limbs the rigidity is increased. Attempts to open the eyelids is strongly resisted, the eye-balls turning upwards, sometimes moving rapidly in all axes.

Attempts to give nourishment by mouth were un-successful on account of the rigidity of the jaw muscles. All muscles are in extreme tension. There is no response (apparent) to needle pricks, except when stroking the sole of the foot there is a slight plantar flexion of the toes. The entire body can be lifted from the bed by raising the head and neck.

The next day there was a general muscular relaxation for a few hours. The state of stupor with rigidity continued for several weeks, with occasional interruptions in the form of excitement, with throwing the arms about, groaning loudly, or rapidly repeating inarticulate sounds (verbigeration). At times there was a decided catalepsy lasting but a few hours at a time. This condition usually came on after brief periods of muscular relaxation and was soon followed by a return of the rigidity.

April 1, 1908.—The condition now varies from one of rigidity of the entire body, when he was quiet and motionless, to a state of noisy restlessness; at times moaning for hours without ceasing, and tossing the head violently from side to side.

April 10, 1908.—This morning it was found that the patient had bruised the right cheek and the bridge of the nose, the former swollen and discolored. A few days later there appeared a swelling over the middle of the sterno-mastoid (left) which was painful, the patient wincing when ever pressure was made over the swelling. He continued to be noisy, making inarticulate sounds, barking, grunting, and moaning sounds, for about ten days. Rarely was there muscular relaxation (partial), the limbs remaining in whatever position they were placed.

April 30, 1908.—For the first time since the onset of the rigidity, the patient spoke; this was on the occasion of a visit by a relative. He asked to be taken home for fear of some impending danger. The following day he was again visited with the idea of stimulating him to speak, but he gave no evidence that he recognized the presence of his visitors.

May 10, 1908.—Rigidity continued until this date, when muscular relaxation occurred and remained during the greater part of the day, the patient appeared in a state of exhaustion. With the return of the rigidity he became noisy, making inarticulate sounds, yet having the appearance as if he were trying to speak.

May 13, 1908.—Again cataleptic after a period of flaccidity. At this time he took nourishment easily. For several days the rigidity was absent, but the patient did not attempt to speak, nor was he seen at any time to attempt to open the eyes.

May 26, 1908.—Rigidity returned suddenly. He has been noisy for several days. Yesterday he got out of bed, moved the bureau away from the wall, then got down on the floor and kicked against the back of the bureau. The following day he remained quiet; made signs that he wanted something to eat. He ate freely when food was put into his mouth.

June 13, 1908.—Has been taking food well until this date. When food

is now put in his mouth, it is immediately pushed out with the tongue pushed between the tightly compressed lips. At times he would partly open the eyes and toss the head as if rejecting food.

July 3, 1908.—General condition is unchanged; once in a restless period threw himself out of bed. At times, took fluid nourishment well. Bowels moved naturally for the first time since the rigidity came on. On one occasion the patient made an unsuccessful attempt to raise himself up in bed.

July 9, 1908. Patient is in a relaxed state. He made several attempts to speak, as indicated by the facial expression; also indicated by rubbing the abdomen with the hand and expression of the face that he suffered pain, and, by a twirling movement of the hand above the head, some unusual sensation, or discomfort.

July 23, 1908.—When visited by relatives he spoke saying, "Take me home." When answered in the affirmative he said, "No you won't." After the visitors left he became very restless, appeared cross though he did not speak. He remained quiet and rigid for several days. Subsequent visits by relatives were apparently not noticed.

August 4, 1908.—For several days he has been sitting up in a chair for a few hours each day. While in the sitting posture, he is motionless, the head retracted, arms rigidly flexed at the elbows, the fingers rigidly extended. When visited he seemed to know there was a new-comer in the room. In a whispering, sighing voice, the patient said, "Where am I?" "Don't leave me." He rubbed the left arm and elbow with the other hand and brought his hand forcibly to the head.

The following day, again when visited, the patient while sitting up, began to moan and asked that the writer, calling him by name, be sent for. Sobbing the patient said, "Oh, that cruel man, don't let him twist my arm; he twists it back and front, and says, 'You —— —— —— I'll twist you till you're green in the face.' Oh, Doctor, fix my arm; beg that cruel man not to twist my arm." During this time, the patient wept bitterly, still continuing in the rigid state. Shortly after that he said, "What is the matter with my head? It seems I don't know anything, except for a flash, and then it all goes back again. My fingers are getting stiff again. Stay with me. Now it is getting dark again. My fingers are getting stiff again now."

The rigidity then became more pronounced and the apparent stupor returned. During the period of consciousness, the eyelids remained unopened. The arm condition of which he complained was the left elbow which was swollen and distinctly tender on pressure. Under treatment locally, the tissues returned to the normal appearance.

September 12, 1908.—The general rigidity continued. Patient can be fed only with difficulty on account of the tightly closed jaws and the lips being rigidly compressed. At times he could be fed with comparative ease, that is food could be gotten past the lips, often however, only to be immediately ejected by the tongue or forcible closure of the lips. When once food was passed into the mouth, far enough, there was no interruption in swallowing. The bowels continue obstinately constipated; moved only by enemata.

October 15, 1908.—Again the patient appeared as if he were trying to speak, turning his head towards the nurse, as if trying to get near, though the trunk and extremities remained rigid, and the respirations becoming short and rapid.

In a few moments the breathing became shallow and quiet, and there was a return to the former stuporous state.

The rigidity now became so marked that when the patient was moved bodily, as in carrying him from the cot which he occupied out of doors during the day, it was possible to carry him by the shoulders and heels, the entire body in rigid extension, was maintained in a straight line. Occasionally there was distinct opisthotonous.

December 23, 1908.—General condition remained unchanged until, on one occasion, the patient raised his head and moved the facial muscles as if trying to speak. The breathing then became rapid and an almost inaudible moan was heard. All attempts at passive movement of the extremities were met with marked resistance. At times the facial expression appeared to indicate either physical or mental discomfort. Though the rigidity continued there were distinct contractions of the femoral muscles, appearing as if there were voluntary attempts at movement of the legs. The abdominal muscles were hard. Other attempts at speech were evident from the slight movements of the compressed lips, and the rapid movement of the laryngeal cartilage, increased respiration rate, and a flow of tears.

During the next twelve days the patient was noisy, often moaning continuously for an hour or more. Occasionally he took nourishment easily, but at no time was he seen to be able to move any other part of the body. During sleep, or what appeared to be sleep, the jaw would drop. The slightest movement of the nurses about him would be followed by a return of the rigidity. The only dependable evidence of the presence of profound sleep was rarely obtained, namely, the snoring of the patient.

For about three weeks the patient took nourishment in sufficient amount to improve his state of nutrition. The muscular rigidity continued, *having at this time existed for a year*, with only the interruptions mentioned above.

The physical improvement lasted but a few weeks. Soon the difficulty in feeding returned and practically all food given by mouth was ejected. On one occasion the patient was heard making a sucking sound with the lips. Water and milk given at that time were swallowed with ease, though a few minutes later he could not take anything by mouth.

The patient was then fed mechanically with both nasal and rectal tubes. In the next two months he lost flesh rapidly, his weight fell to 71 pounds.

There were no decided changes until June 2, 1909, when about to give the patient nourishment, it was noticed that the lips and jaws were moving, the eyes partly opened, wider than they had been seen since admission, froth issuing from the mouth, and the respirations deep and rapid. The pulse was small, weak and quick; temperature 97 per rectum.

Following this attack which lasted but a short time, there was a pro-

gressive failure in the strength of the pulse and respiration. All food given by mouth was ejected, nutrient enemata were expelled, and most of that given by nasal tube was regurgitated. The patient died June 17. About one hour before death all muscles were relaxed, and the joints hyper-mobile, apparently from atrophy of the articular cartilages. Necropsy was not obtained.

The case here described appears to be an unusual one, and of sufficient interest to warrant placing it on record. The condition, occurring in a male who was past middle life when the disorder began, appeared to have as a remote etiological factor a traumatism in which the element of shock was greater than the actual injury, namely, a fracture at the wrist. For a year he was well enough to attend to business, but was not in his usual health. During the next year he had several attacks of pain accompanied by an indefinite, transitory psychotic disturbance. Three weeks before the appearance of the definite katatonic symptoms, the patient had been operated upon for the relief of the obscure abdominal condition believed to be the cause of the attacks of pain. The mental symptoms appeared abruptly, following sleep, with hallucinations and mental confusion, followed in a few hours by the katatonic stupor. This was a continued katatonic rigidity which lasted for more than a year, with occasional interruptions of psycho-motor excitement. The persistence of the intense rigidity was apparently the direct cause of death, by reason of the marked degree of inanition which resulted from the inability to retain food.

Except from a symptomatic viewpoint, our case still remains among the "unclassified." According to Wernicke's classification, we may place it among the akinetic motility psychoses. He regards the katatonic psychoses as either akinetic or parakinetic, there being no sharp line of demarcation between the two groups, and states that they "are generally met with in the majority of chronic psychoses." Wernicke also regards the instances of extreme immobility as being due to an involvement of the sensorium, and he believes that the implication of the sensory domain is an unquestionable sign of the extension of the pathological process to the psycho-motor region. In our case there was unquestionable involvement of the sensorium. When the rigidity was greatest there was no external response to painful stimuli, except a slight plantar flexion of the toes when pricked with a needle. At this time the immobility was so marked that the patient could be carried while the entire body was in rigid extension.

In the mental analysis of patients in this state there is necessarily much uncertainty in the interpretation of results. That there were hallucinations of both sight and hearing was determined without difficulty, if we are to regard the statement of the patient's description of " the negro entering the window," and the voice of the " cruel man " as significant. At this time the patient complained of the painful elbow-joint; the rigidity was then diminished, and, accordingly, the clouding of the sensory field lessened. The pain complained of was, to us, explained as the result of the protracted muscular contraction, and a painful condition of the joints, similar to that painful sensation one experiences when a limb is held in a position of forced extension for any length of time.

The tactual sensation which was wrongly associated with the auditory hallucination was probably brought about as follows: the location of the patient's bed was such that the writer when examining the patient frequently attempted to flex the patient's left arm. In the clouded state of the sensorium the patient did not recognize the person who touched him; he associated the painful sensation with the unpleasant auditory hallucination, thus evolving the voice of " that cruel man ", giving here an instance of faulty association of a real sensation with a false sensation and a resulting erroneous judgment.

In regard to the matter of the diagnosis we have an uncompleted clinical picture. To determine the disease type in which the katatonic condition was only episodal, it would have been necessary to follow the disease further in its course. The katatonia was of course not the whole of the psychosis, protracted as it was, the case was terminated before a differentiation of the disease type could be made.

NOTE.—Since the writing of this article there appeared a report of five cases of "Late Katatonia" by M. Sommer (Zeitschrift für die gesamte Neurologie und Psychiatrie, Vol. 1, No. IV, 1910). That author regards katatonia as relatively frequent in the involution period.

BIBLIOGRAPHY.

Alter, W.: Genesis of Certain Symptoms in Catatonia. Neurologisches Centralbl., 1904.

Arndt, E.: Ueber die Geschichte der Katatonie. Cbl. f. Nervenheilk. u. Psychiatrie, XXV, Nr. 145, S. 81.

Aschaffenburg: La Catatonie. Presse Med. Belge, 1899.

Berkley and Follis: Thyroidectomy and Thyro-lecethin Treatment of Katatonia. Amer. Jour. of Insanity, Jan., 1909.
Brownrigg, A. E.: Kraepelin's Clinical Picture of Katatonia. Amer. Journal of Insanity, Jan., 1901.
Bianchi, L.: Textbook of Psychiatry. New York, 1906.
Clarke, Campbell: Mental Diseases, London, 1897.
Clouston, T. S.: Mental Diseases, 1897.
Dawson, W. R.: Difference Between Katatonia and Melancholia Attonita. Jour. Ment. Science, Oct., 1903, p. 686.
Devine, H.: Case of Katatonia in a Deaf Mute. Jour. Ment. Sci., Oct., 1907.
Dreyfus, J. G.: Tod in Katatonia bei Dementia Præcox. Cbl. f. Nervenheilk. u. Psychiatrie. N. F. Bd. XVIII, 1907.
Gadelius, Bror: Hysteri och Katatonie. Hygeia, Festband, No. 17.
Ilberg: Die Bedeutung der Katatonie. Allg. Zeitschr. f. Psych., 1898, LV, pp. 487-426.
Kahlbaum, K.: Zur Causistic der Katatonie. Monats. f. Psychiat. u. Neurolog. Bd. XII, Heft I., S. 22.
Knavel and Pollock: Amer. Jour. Insanity, Jan., 1910.
Lewis, Bevan: Textbook. Philadelphia.
Lugaro, E.: Modern Problems in Psychiatry. Manchester, 1909.
Macpherson, J.: Mental Affections. London, 1899.
Mickle, W. J.: Katatonia in Relation to Dementia Præcox. Jour. Ment. Science. Jan., 1909.
Peterson and Langdon: Katatonia. Proceed. Amer. Med.-Psych. Assoc., May, 1897.
Pfister: Aetiologie und Symptomatologie der Katatonie. Allg. Zeitschr. f. Psych. Bd. 63, Heft 2, p. 275.
Schaefer, Gerhard: Katatonie bei Hirnabscess. Mitteil. aus Hamburg. Staats-Krank. Anstalten, p. 127.
Schönfeld, Artur: Katatonie nach Trauma. Wiener Med. Wochenschr. Nr. 47, p. 2586.
Séglas, J.: Katatonic Symptoms in Course of Paresis. Nouvelle Iconographie d. l. Salpetriere. Jan.-Feb., 1907.
Serbski: Jour. Ment. Path., Vol. II, No. 4.
Stadelman, H.: Die Katatonie, Das Wesen der Psychosen. Muenchen, 1905.
Tanzi, E.: Textbook of Mental Diseases, London, 1909.
Tetzner, R.: Tod durch gehaufte Krampfanfalle. Psychiatr-Neurol. Wochenschr., VII. Jahrgang, Nr. 24, p. 225.
Vogt, R.: Zur Psychologie der Katatonischen Symptome. Cbl. f. Nervenheilk. u. Psychiat., XXV, Nr. 150, S. 433.
Worcester, J. L.: The Katatonic Symptom-Complex. Amer. Jour. Insanity, April, 1899.
Wernicke, Carl: Grundriss der Psychiatrie, 2 A. Leipsig, 1906.
Von Tschisch: Monatschr. f. Psych. u. Neur., 1899.

ON THE OCCURRENCE OF NODULAR NECROSES (DRUSEN) IN THE CEREBRAL CORTEX. A REPORT OF TWENTY POSITIVE CASES.

By JOSEPH B. BETTS, M. D.,

Assistant Physician, Buffalo State Hospital.

Oskar Fischer in 1907 found certain minute nodules in the cerebral cortex of cases of senile dementia which he named "drusige nekrosen" and which are now generally known as "drusen." He considered that the necrotic areas were possibly of microbic origin and found each surrounded by a peculiar club-shaped proliferation of the intercellular neurofibrillæ. He thought them to be characteristic of senile dementia.

In 1909 Oppenheim examined a number of senile brains and in general confirmed Fischer's observations. He found them only in senile brains and failed to find them in cases of general paralysis or in non-senile psychoses. As they were found in non-demented seniles examined by him, he does not agree with Fischer that they are pathognomonic of senile dementia. Oppenheim believes the nodules themselves to be small areas of dead tissue and the surrounding fibrillæ to be glial in origin rather than neurofibrillar.

The present communication is intended merely as a report on the occurrence of nodular necroses in cases observed by the writer and no attempt is made to determine the nature of the pathological process or its distribution in the cortex.

Bielschowsky's neurofibril method was employed in this study, and in all 81 brains were examined.

In Series A (42 cases), the right paracentral region only was investigated, the sections having been made for a study of the endocellular neurofibrils in various psychoses. The negative cases in this series are therefore not entirely conclusive as such, but are included for comparison with the five positive cases in this series. Furthermore, it has been found in the study of the cases in Series B that when drusen were present in the frontal regions they were usually found also in the paracentral lobules.

From the 39 brains in Series B slices were taken as a routine measure from L. $F._1$, R. $F._1$, and R. P. C. L. Distinctly atrophied but not softened, convolutions also received especial attention in the negative senile cases.

The results of the examination for drusen in the cases of Series A may be summarized as follows:

1. Thirty-seven negative cases, viz.:

Epilepsy—5 cases, aged from 20 to 46 years.

Alcoholic psychoses—4 cases as follows: 1 delirium tremens, aged 44; 1 acute hallucinosis, aged 39; 1 alcoholic deterioration, aged 68, and 1 of the paranoid type, aged 45.

Acute delirium (not alcoholic)—3 cases, aged 16, 41 and 67 years respectively.

Brain syphilis—1 solitary gumma, 1 case, aged 36 years.

Dementia præcox—5 cases, aged from 20 to 52 years.

General paralysis—10 cases, aged from 29 to 52 years.

Central neuritis—6 cases, aged from 40 to 50 years.

Undifferentiated depression with suicide at 59 years, 1 case.

Melancholia—1 case, aged 68 years, and 1 arteriosclerotic brain disease with focal lesions, 1 case, aged 70 years.

2. Five positive cases in which drusen were present in the right paracentral lobule, the only region examined by the Bielschowsky method.

Case I.—C. S., female, aged 75 years. Admitted December 5, 1902. The onset was gradual. After several years of irrational conduct, at 70 years she developed the idea that she had inherited a large sum of money and that she was to be married. Finally she became agitated and apprehensive, imagining she was to be killed for her money and she heard voices which told her that her relatives were being killed. She showed marked loss of memory both for the remote and recent past, and was quite disoriented, imagining she was near her home, which was many miles distant. She was well nourished but there was extreme general arteriosclerosis. During her hospital residence she occasionally had attacks of syncope with irregular intermittent pulse. October 14, 1907, after syncopal attack she became stuporous. Heart intermittent. Temperature 104° F. During the stupor there was much general rigidity with coarse tremor and jactitations of the extremities. October 21, 1907, died shortly after a severe rectal hemorrhage.

Abstract of Autopsy.—Body well nourished. Chronic adhesive pachymeningitis. Brain 1000 gms. General atrophy of convolutions with

dimpling of their surfaces. No focal lesions. Marked atheroma of basal vessels. Lungs emphysematous. Heart 330 gms. Left ventricle hypertrophied. Extreme calcareous atheroma of aorta. Spleen 130 gms. Old perisplenitis. Liver 1285 gms. Kidneys arteriosclerotic; left 120 gms., right 95 gms. Adenocarcinoma of rectum.

CASE II.—S. McC., aged 65, negress. Admitted July 27, 1899, from another institution. Early history imperfect. Onset unknown. On admission appeared like an old case of dementia præcox, showing mutism and mannerisms. During her hospital residence was quite inaccessible on account of negativism and mutism, but appeared much demented and was filthy in habits. In May, 1906, she developed general œdema with albuminaria; became weak and emaciated. Died May 24, 1906.

Abstract of Autopsy.—Body much emaciated. Lordosis and scoliosis from old tubercular spine. Adhesive pachymeningitis. Brain 1085 gms. General atrophy of convolutions. Fibrous thickening of basal vessels with a calcareous placque in the left carotid. Pulmonary tuberculosis and tuberculosis pericarditis. Heart 415 gms. Spleen 165 gms. Chronic perisplenitis. Liver 1110 gms. Chronic perihepatitis. Kidneys, right 110 gms., left 150 gms. Arteriosclerotic contraction. A few patches of sclerosis in the intima of the aorta without calcareous plates.

CASE III.—C. R., female, widow, 60 years, temperate. Onset of psychosis at 27 years with silly ideas—wanted to marry a near relative, etc. She was very emotional and soon became much deteriorated. During her 33 years of hospital life she was filthy and destructive in habits, and extremely incoherent. There was much noisy excitement with marked auditory hallucinations. A month before death, a severe attack of facial erysipelas, after which she failed steadily. A few days before death there was slight diarrhœa and rigidity of the extremities without jactitations.

Abstract of Autopsy.—A small frail woman, much emaciated. Dura thickened but not abnormally adherent. Brain 1135 gms. C. S. fluid much increased. Convolutions narrow, showing general atrophy without focal lesions. No marked sclerosis of basal vessels. Heart 160 gms. Thin walled and flabby. Aorta showed a few patches of atheroma. Pulmonary emphysema with one small healed tubercle. Marked atrophy of viscera. Spleen 45 gms. Liver 605 gms. Brown atrophy. Kidneys arteriosclerotic, left 75 gms., right 65 gms. Microscopically the Betz cells of both paracentral lobules showed axonal alteration. Cortical vessels moderately fibrous.

CASE IV.—J. H., female, German, 77 years of age. Admitted December 26, 1895. Onset at 52 years with menopause. While in the hospital she was thoroughly demented, showing much noisy excitement in reaction to visual and auditory hallucinations. Nothing could be gained from her in conversation but she appeared quite disoriented. She had several attacks of syncope and after gradual bodily failure died July 30, 1907.

Abstract of Autopsy.—Body emaciated. Dura firmly adherent to calvarium. Early hemorrhagic internal pachymeningitis. Pia thick and cloudy. Patches of atheroma on basal vessels. Heart 235 gms. Old aortic valvulitis. Abdominal aorta calcareous. Emphysema of lungs with old tubercular scars at apices. Spleen 65 gms. Arteriosclerotic liver, 725 gms. Brown atrophy. Kidneys, right 85 gms., left 75 gms. Arteriosclerotic contraction.

CASE V.—J. V., male, single, German, temperate, age 78 years. Admitted May 3, 1902. Previous to admission he was for several years an inmate of the County Hospital. Onset of psychosis at 73. He became "confused and demented" with agitation in which he feared he was to be killed. On admission he showed extreme dementia of the senile type. At 74 he began having epileptiform convulsions which occurred until death, from two to six times a month. After general physical and mental failure he died November 6, 1907.

Abstract of Autopsy.—Body obese. Dura firmly adherent to calvarium and showed internal hemorrhagic pachymeningitis. Brain 1340 gms. General atrophy of convolutions, more marked in L. F. 3 and along the left Sylvian fissure. Extreme atheroma of basal vessels. Heart 400 gms. Old aortic valvulitis and hypertrophy of left ventricle. Extreme atheroma of aorta especially of its lower portion. Infarct of lungs and hypostatic pneumonia. Spleen 140 gms. Chronic perisplenitis. Liver 1340 gms. Very adherent to diaphragm. Kidneys 115 gms. each. Marked arteriosclerotic contraction with increase of pelvic fat.

Summary of cases in Series B, in which the frontal and paracentral regions were investigated (39 cases):

1. Twenty-four negative cases (no nodular necroses found), as follows:

Epilepsy—1 case, aged 34, with bilateral microgyria of the frontal lobes; general emaciation with extreme atrophy of viscera. Brain 920 gms.

General paralysis—3 cases, aged 40, 60 and 70 years respectively.

Brain tumor—1 case, a large frontal endothelioma in a man aged 60 years.

Central neuritis—2 cases, aged 48 and 70 respectively.

Chronic chorea—1 case, aged 60 years.

Dementia præcox of long duration—4 cases as follows:

(a) Male, 68 years; onset at 39;
(b) Female, 79 years; onset at 26;
(c) Male, 58; onset at 28;
(d) Female, 65; onset unknown, but the duration was was known to be over 30 years.

Arteriosclerosis with focal brain lesions—4 cases as follows:

(a) Male, aged 63 years;
(b) Female, aged 66;
(c) Female, aged 65;
(d) Male, aged 45 years.

Manic depressive psychosis—1 case, aged 76 years; onset in early adult life.

Alcoholic deterioration—2 cases as follows:

(a) Male, aged 69; onset at 50 years;
(b) Female, 65 years; onset at 53 years.

Senile dementia—5 cases which were negative, on careful examination of the frontal and central regions and especially of atrophied convolutions.

The abstracts of the clinical and anatomical findings of these senile cases are here given for comparison with the positive cases:

CASE A.—L. O., female, 71. Onset gradual at 69. Marked memory defect and disorientation; said she was 10 years old and did not know where she was. On admission she was very feeble; gave her age as 16 and appeared extremely demented; pupils unequal but with good reaction to light and accommodation. Arcus senilis present. Tendon reflexes normal; coarse tremor of hands; tongue steady. Died, 5 weeks after admission, of bronchopneumonia.

Abstract of Autopsy.—Body well nourished; dura firmly adherent to calvarium. Brain 975 gms. Extreme general atrophy without focal lesions; extreme nodose sclerosis of basal vessels. Aorta extremely atheromatous throughout, showing much calcareous deposit and ulceration of intima. Bronchopneumonia. Spleen 95 gms. Arteriosclerotic. Liver 985 gms. Slight cirrhosis. Kidneys, right 75 gms., left 80 gms. Arteriosclerotic.

CASE B.—S. W. S., male, 71 years. Onset several months before death with childishness, extreme memory defect and nocturnal restlessness. On admission, in feeble condition; very dull and apathetic; made random replies, showing very defective memory and time disorientation. Died of bronchopneumonia 4 days after admission.

Abstract of Autopsy.—Body emaciated. Brain 1165 gms. Pia thick and œdematous; diffuse sclerosis of basal vessels without patches of atheroma. Bronchopneumonia. Moderate atheroma of the aorta throughout. Chronic perisplenitis. Fatty liver. Kidneys nearly normal.

CASE C.—D. M., female, 75. Onset at 74. A resident for many years in almshouse; gradually became childish and forgetful. On admission she screamed loudly and complained of dizziness; the next day an apoplectic stroke with left hemiplegia. Died 6 days after admission.

Abstract of Autopsy.—Body well nourished. Dura firmly adherent to calvarium. Brain 1085 gms. No focal atrophies. Moderate sclerosis of basal vessels with thrombus in right carotid. The right hemisphere was extensively softened. Heart 550 gms. Chronic mitral valvulitis. Aorta extremely atheromatous in its lower portion. At its origin a large saccular dilatation without marked atheroma. Œdema of lungs with a large infarct in the left lower lobe. Spleen — gms. Arteriosclerotic. Liver — gms. Passive congestion. Kidneys, left 95 gms., right 115 gms. Arteriosclerotic contraction with a large cyst in the left.

Case D.—M. W., female, 84, German, widow. Onset at 68 with ideas of persecution. Memory and disorientation not seriously disordered. Coarse tremor of head and extremities somewhat resembling paralysis agitans.

Abstract of Autopsy.—Moderate emaciation. Brain 1230 gms. Basal vessels, no apparent atrophy. Heart 450 gms. Old aortic and mitral valvulitis. Lungs hypostatic. Spleen 100 gms. Liver 990 gms. Passive congestion. Arteriosclerotic contraction and infarct of kidneys.

Case E.—H. L. B., male, 72, temperate. Onset 10 days before death with euphoria, religious exaltation. He said he had received great spiritual strength from God and everything was peaceful and beautiful. He was well oriented and his memory was not seriously impaired. Died suddenly of angina pectoris the day following admission.

Abstract of Autopsy.—Body emaciated. Dura not adherent to calvarium. Brain 1245 gms. Moderate general atrophy Marked basal arteriosclerosis. Coronary atheroma, fibrous myocarditis. Aorta extremely atheromatous throughout. Old perisplenitis with atrophy, 80 gms. Liver 1020 gms. Arteriosclerotic contraction of kidneys with old infarct scars.

2. Fifteen positive cases, Series B, as follows:

Case VI.—A. M. C., male, 66, salesman, intemperate. Admitted May 9, 1900. Details of onset unknown. On admission confused and dull. Marked loss of memory for recent events with fabrications (Korsakow). Complained of dizziness. Was obese. Gait feeble and unsteady. Speech thick and rambling. Pupils normal. Pulse 52, irregular. Marked arteriosclerosis. During his hospital residence, the momory defect was the most prominent mental symptom. Occasionally he was a little excited and pugnacious in reaction to auditory hallucinations. Fabrications noted occasionally. Died July 26, 1908, after progressive emaciation. The heart was weak and irregular. Urine contained albumen and pus. Some œdema of eyelids and extremities present during final illness.

Abstract of Autopsy.—Body emaciated. Large and strongly built man. Dura thick but not abnormally adherent. Pia thick, œdematous and tough, especially over cisterna and sylvian regions; marked atheroma of basal vessels. Multiple areas of softening in cortex of both hemispheres and in cerebellum. Brain weight 1485 gms. Heart 595 gms. Old

aortic valvulitis and atheroma of the coronaries. Extreme atheroma of the whole aorta. Hypostatic congestion of lungs. Spleen 275 gms. Passive congestion. Liver 1675 gms. Passive congestion. Kidneys, left 300 gms., contained a large calculus and much pus; right kidney 380 gms. Congested.

CASE VII.—M. S., female, 71, Scotch. Admitted November 30, 1907. Onset at 70 with restlessness, fear and memory defect. She wandered about at night complaining that voices were calling her. On admission, feeble and demented. Was quite disoriented and made contradictory statements about her age, etc. Said it was September, 1864, and had forgotten her third marriage. Some insight for memory defect. Pupils normal with good reaction to light and in accommodation. No arcus senilis. Elbow reflexes normal. Kneejerks lively. No ankle clonus. Gait unsteady. Heart action irregular and intermittent. Nine months after admission was noted as quite demented; said she was 26 or 27 years old. November 5, 1908, apoplectic stroke with left hemiplegia. Died November 12, 1908.

Abstract of Autopsy.—Body well nourished. Calvarium thick, soft and spongy. Dura not abnormally adherent. Brain 1330 gms. Convolutions not noticeably atrophied. Pia thick and congested. Large fresh hemorrhage in right internal capsule opening into lateral ventricle. Extensive atheroma of basal vessels. Heart 280 gms. Coronary sclerosis and slight fibrous myocarditis. Atheroma of aorta more marked in thoracic portion. Hypostasis of lungs. Spleen 60 gms. Old perisplenitis and arteriosclerosis. Liver 1025 gms. Passive congestion. Kidneys contracted, left 120 gms., right 100 gms.

CASE VIII.—E. LeG., male, laborer, Bohemian, 82 years old. Committed as insane at 50 years of age. Was a continuous resident in institutions for the insane for 32 years. Details of onset unknown. He was noted as "irritable, gesticulating mildly. Responds to hallucinations; idle and untidy." On admission to the Buffalo State Hospital was much demented. While here was often noisy and restless; talked much incoherently in reaction to hallucinations. No information could be obtained from him in conversation. After gradual physical failure he died July 29, 1907.

Abstract of Autopsy.—Body well nourished. Dura firmly adherent to calvarium. Early internal hemorrhagic pachymeningitis. Brain 1350 gms. C. S. fluid much increased. Pia very thick and tough. Nodose atheroma of basal vessels except the basilar which is diffusely thickened. Foci of arteriosclerotic softening affecting nearly the whole left temporal and left inferior occipital regions. A small focus also in the right occipital pole. Heart 370 gms. Much epicardial fat. Coronary sclerosis. Lungs hypostasis. Spleen 120 gms. Chronic perisplenitis and arteriosclerosis. Aorta shows extreme atheroma throughout with marked calcareous deposit in lower portion. Liver 1065 gms. Passive congestion. Arteriosclerotic kidneys with a few cortical cysts, left 115 gms., right 125 gms.

CASE IX.—M. F., male, 61 years, English, clerk, intemperate. Admitted October 6, 1898, from Manhattan State Hospital where he was committed in February, 1890. Onset at 41 years. Facts from medical certificate: "He is very dull and stupid and suffers from great loss of memory. He does not appreciate his position or surroundings or anything that goes on about him. Simple and foolish in conversation, nothing intelligent can be obtained from him." In 1898, on admission, he complained of loss of memory and he could not tell how long he had been in the Manhattan State Hospital. During his hospital residence he showed simple dementia without delusions but with marked memory defect. He was easily confused and often wandered about aimlessly. There was a gradual physical failure and toward the end of his illness he had several attacks of syncope. Died of pulmonary gangrene, May 1, 1910.

Abstract of Autopsy.—Large, muscular man; fairly well nourished; dura moderately adherent over the whole extent of the calvarium. Diffuse cloudiness of pia. The frontal lobes are coherent and the temporal tips strongly adherent to the frontal lobes. Moderate atrophy of convolutions. Brain weight 1285 gms. Marked nodose atheroma of basal vessels. Heart 470 gms. Old mitral valvulitis. Coronaries rigid. Hypertrophy of left ventricle. Moderate atheroma throughout the aorta. Lungs show old unresolved pneumonia with areas of gangrene. Spleen 165 gms. Negative. Liver 1300 gms. Passive congestion. Kidneys arteriosclerotic contraction.

CASE X.—M. F. B., female, 79 years. Admitted May 18, 1896, from another institution. Onset at about 65 years; early history and details of onset not obtainable. During her residence here she appeared like a typical senile dement with marked memory defect and with poor orientation. She could give no details about her past life. Died June 11, 1907, one day after an apoplectic stroke with left hemiplegia.

Abstract of Autopsy.—Very large, strongly built woman. Moderately emaciated. Adhesion of pachymeningitis. Brain 1500 gms. Large but showing atrophied areas in the parietal region and especially of both temporal tips with extreme état crible. Rather extensive cortial hemorrhages in R. F. 2 and R. F. 3. Pulmonary emphysema with bronchopneumonia of dependent portions. Heart 400 gms. Negative except hypertrophy of left ventricle. Aorta extreme atheroma, especially of lower portion. Nutmeg liver. Spleen 80 gms. Perisplenitis and arteriosclerosis. Arteriosclerotic contraction of kidneys.

CASE XI.—C. S., female, United States, widow, temperate, age 84. Admitted April 4, 1904. Patient was a normal healthy woman until onset at 68 years, when she became childish and forgetful and showed progressive physical and mental failure. On admission she was quite disoriented and exhibited the usual senile memory defect. She had normal pupils but her gait was stiff and the knee jerks were absent. Later she showed much restlessness and childishness, fumbling much with her clothing. After gradual failure she died of bronchopneumonia August 1, 1909.

Abstract of Autopsy.—Body much emaciated. Scalp atrophied and almost completely bald. Internal hemorrhagic pachymeningitis with thick new-formed membrane on the right side. Brain 940 gms. Extreme general atrophy. Marked basal atheroma. Heart 235 gms. Moderate fibrous myocarditis. Extreme atheroma of aorta. Bronchopneumonia. Spleen 60 gms. Liver 910 gms. Kidneys, right 65 gms., left 80 gms. Arteriosclerotic contraction.

Case XII.—H. L., female, 86 years. Admitted May 27, 1909. Was a normal, temperate woman. Onset was gradual, extending over 10 years, leading to commitment at 84. She was so demented that commitment was necessary. At first was childish and depressed. For two years previous to admission there was marked memory defect, much worry and depression. On admission is noted as "thoroughly demented, restless and disoriented." Eyes showed arcus senilis; pupils unequal with slight light reaction. Tendon reflexes normal; she was very restless and uneasy; failed progressively and died of pneumonia, June 8, 1909.

Abstract of Autopsy.—Body much emaciated. Dura thick and firmly adherent to calvarium. Brain 1215 gms. Pia thick and œdematous. General atrophy of convolutions more marked in frontal lobes. Basal vessels atheromatous. Heart 255 gms. Negative. Aorta moderately atheromatous with calcareous plates at its bifurcation. Spleen 105 gms. Liver, brown atrophy, 800 gms. Arteriosclerotic contraction of kidneys, left 105 gms., right 125 gms.

Case XIII.—R. V., male, 76 years, Italian. Admitted October 6, 1895, from Manhattan State Hospital. Onset at 64 with depression and dementia. History from Manhattan State Hospital states: "He is simple and demented; little interest in his surroundings and does not appreciate his position." During his residence here he showed no marked mental symptoms except simple dementia. Died October 28, 1909, of bronchopneumonia.

Abstract of Autopsy.—Body well nourished. Brain 1230 gms. General atrophy of convolutions. Pia thick and injected. Calcareous atheroma of basal vessels. Heart 600 gms. Hypertrophy and dilatation. Extensive bronchopneumonia in both lungs. Nutmeg liver, 1840 gms. Spleen 125 gms. Kidneys, arteriosclerotic contraction with increased pelvic fat, right 140 gms., left 165 gms.

Case XIV.—G. W. S., male, 73 years. Admitted October 22, 1909. Onset of psychosis at 70 with failure of memory. Confusion of thought and speech. He gradually became more demented; lost control of sphincters, and at 73, just before commitment, became delirious, weak and helpless. There was no paralysis but a coarse tremor of the extremities was present. On admission he was semistuporous and physically weak. Temperature 101.2 F. The pupils were equal, light reaction incomplete. The kneejerks were unequal, the right normal, the left exaggrated. Ankle clonus in both sides. Left arm spastic and the left grip

much weaker than the right. He gradually failed, the stupor became profound and the tremors continued until death, which occurred 6 days after admission.

Abstract of Autopsy.—Body well nourished. Dura extensively adherent to calvarium. Internal hemorrhagic pachymeningitis of right side with a thick new membrane and a large fresh blood clot which compressed and flattened the right hemisphere. There was general atrophy of the convolutions. Brain weight 1370 gms. Extreme yellow nodose atheroma of basal vessels. Heart 320 gms. Fibrous myocarditis. Aorta moderately atheromatous. Bronchopneumonia of both lungs. Spleen 175 gms. Acute congestion and arteriosclerosis. Liver 1835 gms. Large and pale. Kidneys contracted and arteriosclerotic, left 125 gms., right 125 gms. Old scar on corona glandis.

Case XV.—P. J. H., male, Irish, 70 years. Admitted October 31, 1906. Healthy until 67, then a fall with serious injury; details unknown. After this childish and forgetful. Agitated for a short time; finally becoming demented with marked memory defect. On admission he was restless and childish; mood changeable with much confusion. Retention and calculation very poor. He complained of dizzy spells and his gait was stiff. Pupils equal, light reaction sluggish; kneejerks and elbow reflexes much exaggerated. Coarse tremor of hands and tongue. About two years after admission, after gradual failure, he became more confused. Finally he was unconscious for a week during which time he was unable to swallow. Died October 6, 1908.

Abstract of Autopsy.—Body emaciated. Dura firmly adherent to calvarium. Brain 1175 gms. Milky patches in pia. Atrophy of convolutions especially noticeable in the frontal and temporal regions. No very marked sclerosis of basal vessels. Heart 185 gms. Fibrous myocarditis. Atheroma of aorta especially in its lower portion. Bronchopneumonia. Spleen 40 gms. Arteriosclerotic. Liver 940 gms. Kidneys, right 120 gms., left 130 gms. Arteriosclerotic.

Case XVI.—S. L., Polish Jew, single, tailor, 63. Admitted October 6, 1898, from Manhattan State Hospital. Onset at 31 years. Details unknown. While in the Buffalo State Hospital he was a quiet case of dementia. Talked to himself incoherently and appeared like an old case of dementia præcox. Died March 26, 1910, of gastric carcinoma. During the few days before death there was muscular rigidity and contraction of the legs and for several hours fibrillary twitchings of muscles throughout the body, but more especially in the calf muscles. There was profuse diarrhœa; death in coma. On account of these symptoms a provisional diagnosis of "central neuritis" was made. (No axonal alteration found.)

Abstract of Autopsy.—Body extremely emaciated. Brain 1220 gms. Slight general atrophy. Condition of dura not noted. Basal vessels show little sclerosis with no calcareous deposits. Heart 250 gms. Fibrous myocarditis. Moderate atheroma of aorta. Bronchopneumonia. Spleen

85 gms. Liver 1100 gms. Brown atrophy. Kidneys, right 85 gms., left same. Chronic diffuse nephritis. Slight arteriosclerosis. Scirrhus carcinoma of stomach and pancreas.

CASE XVII.—M. P., female, 79 years, Canadian, domestic. Admitted by transfer from Willard State Hospital, December 6, 1897. Was formerly in several other institutions. Duration of psychosis unknown. On admission she appeared like an old case of dementia præcox. Very incoherent. Expressed many paranoid delusions, viz., that the doctors had broken her neck, etc. Reacted to auditory hallucinations. She had several attacks of syncope. Died of bronchopneumonia September 2, 1909.

Abstract of Autopsy.—Well nourished. Brain 1170 gms. Moderate general atrophy. Slight nodose sclerosis of middle cerebral arteries. Heart 495 gms. Chronic adhesive pericarditis. Old calcareous aortic and mitral valculitis. Extreme atheroma of aorta, much more advanced in the abdominal portion. Bronchopneumonia. Liver 1285 gms. Firmly adherent to diaphragm. Spleen 185 gms. Perisplenitis and arteriosclerosis. Arteriosclerotic contraction of kidneys; left 105 gms., right 110 gms.

CASE XVIII.—D. McK., female, 73. Admitted June 16, 1891. Onset with menopause at 44 years; details not obtainable. More marked symptoms at 62. She had many somatic delusions, viz., that her body was growing smaller, "only one-third of her body was left," etc. She was very incoherent in speech, disoriented and showed marked memory defect. In the early part of her hospital residence she expressed ideas of wealth but these soon disappeared and her mental output was very limited. At times she reacted to auditory hallucinations. January 4, 1909, "Extremely demented, marked physical failure. Small scirrhus cancer of right mammary gland which extended to the right pleura." June 19, 1909, died of right lobar pneumonia.

Abstract of Autopsy.—Body emaciated. Ulcerated scirrhus of right breast. Chronic adhesive pachymeningitis. C. S. fluid much increased. Brain 1200 gms. Moderate general atrophy without focal lesions. Extreme atheroma of basal vessels. Heart 350 gms. Hypertrophy and moderate fibrous myocarditis. Extreme atheroma throughout aorta. Lobar pneumonia of right upper lobe. Much pleural affusion; pleura studded with small nodules of scirrhus carcinoma. Spleen 50 gms. Fibrous and arteriosclerotic. Liver 680 gms. Moderate increase of fibrous tissue in patches. Arteriosclerotic contraction of both kidneys.

CASE XIX.—C. F., female, milliner, 55 years, United States, single, somewhat intemperate. Admitted May 23, 1901. Onset somewhat indefinite at about 40 years with marked memory defect and disorientation, with mild simple depression. During her first four years' residence she merely showed extremely defective memory for both recent and remote past, then gradually became more untidy and restless, resembling a case of general paralysis. A note made in January, 1905, states: "Memory

defect very marked; speech rambling and ataxic. Test phrases very poorly handled; writing tremulous and almost illegible. Station steady; kneejerks normal. Marked tremor of hands, tongue and facial muscles. Pupils slightly unequal but react well to light and in accommodation. Much emotional instability. Spinal puncture gave a negative cell count." A few months later she became very filthy and destructive in habits. Was quite disoriented, very restless and resistive. She showed progressive physical failure and in October, 1908, a diagnosis of pulmonary tuberculosis was established. During the last few months of her illness she showed great tremor and resistiveness. Died October 31, 1908.

Abstract of Autopsy.—Body extremely emaciated. Dura not abnormally adherent; marked increase of c. s. fluid. Brain 1005 gms. Extreme atrophy of convolutions especially in frontal and parietal regions. Little atrophy of central convolutions. No granulations in fourth ventricle. Basal vessels showed moderate sclerosis. Advanced pulmonary tuberculosis. Heart 109 gms. Coronary sclerosis. Marked atheroma of aorta more advanced in its lower portion. Spleen 60 gms. Fibrous. Liver 1000 gms. Kidneys, right 85 gms., left 95 gms. Arteriosclerotic contraction.

Case XX.—B. M. R., female, German, aged 81 years. Admitted November 5, 1909. Onset of psychosis gradual at about 73 years, with memory defect, childishness and nocturnal restiveness. On admission she was quiet and much demented with "no idea of time or place." She was unable to tell when she was born, the year of her marriage, or when she came to America. Was in feeble physical condition; pupils unequal, the right contracted; no reaction to light or in accommodation obtained. Tendon reflexes normal. Marked general arteriosclerosis. May 16, 1910, died of bronchopneumonia and exhaustion following fracture of femur.

Abstract of Autopsy.—Body emaciated; ununited fracture of left femur. Brain 1000 gms. Dura firmly adherent to calvarium. Pia thick and œdematous; general atrophy of convolutions; slight basal arteriosclerosis (microscopical examination showed very marked fibrosis of small cortical vessels.) Heart 270 gms. Aorta calcareous in lower portion. Lungs bronchopneumonia. Spleen 75 gms. Arteriosclerotic. Liver 815 gms. Brown atrophy. Kidneys, left 75 gms., right 55 gms. Arteriosclerotic contraction.

On reviewing the material we find among the conditions representing the negative cases: Epilepsy, alcoholic psychoses, brain syphilis, dementia præcox, brain tumor, Huntington's chorea, melancholia, central neuritis, diffuse and focal arteriosclerotic brain disorders. It is noteworthy also that drusen were never found in cases of general paralysis, even in the senile period. One case of manic depressive psychoses, with an onset early in life, and death at 76 years, was also negative.

The positive cases are summarized in the following table:

Case.	Sex.	Age at death.	Clinical Diagnosis.	Age at onset.	Anatomical Diagnosis.
I.	F.	75	Senile psychosis.	70	Diffuse cerebral arteriosclerosis.
II.	F.	65	Dementia præcox.	(?)	Do.
III.	F.	60	Dementia præcox.	27	Do.
IV.	F.	77	Unclassified.	62	Do.
V.	M.	78	Arteriosclerotic psychosis.	73	Do.
VI.	M.	66	Alcoholic (Korsakow).	(?)	Focal cerebral arteriosclerosis.
VII.	F.	71	Senile psychosis.	70	Cerebral arteriosclerosis with recent hemorrhage.
VIII.	M.	82	Unclassified.	50	Focal cerebral arteriosclerosis.
IX.	M.	61	Arteriosclerotic psychosis.	41	Diffuse cerebral arteriosclerosis.
X.	F.	79	Senile psychosis.	65	Cerebral arteriosclerosis with recent hemorrhage.
XI.	F.	84	Senile psychosis.	68	Diffuse cerebral arteriosclerosis.
XII.	F.	86	Senile psychosis.	76	Do.
XIII.	M.	76	Senile psychosis.	64	Do.
XIV.	M.	73	Arteriosclerotic psychosis.	70	Do.
XV.	M.	70	Senile psychosis.	67	Do.
XVI.	M.	63	Dementia præcox.	31	Do.
XVII.	F.	79	Dementia præcox.	(?)	Do.
XVIII.	F.	73	Melancholia.	44	Do.
XIX.	F.	55	Arteriosclerotic psychosis.	40	Do.
XX.	F.	81	Senile psychosis.	73	Do.

It will be noticed that drusen are not pathognomonic of senile psychoses, but are occasionally found in other psychoses with an early onset, the individuals having become arteriosclerotic during the long course of the disease.

Some form of cerebral arteriosclerosis was found in all the positive cases and usually associated with the senile type of aortic atheroma, cardiac hypertrophy and contracted kidneys. On the other hand, drusen were not found in a number of senile and arteriosclerotic conditions. The clinical findings of marked memory defect and disorientation were common to all the positive cases, but were also found in some of the negative cases and it has not been found possible to foretell from the clinical findings the presence or absence of drusen.

THE RELATIONSHIP BETWEEN DREAMS AND PSYCHONEUROTIC SYMPTOMS.*

By ERNEST JONES, M. D., M. R. C. P. (Lond.).

Associate in Psychiatry, University of Toronto, Director of the Ontario Clinic for Nervous and Mental Diseases.

At first sight the resemblances between dreams and psychoneurotic symptoms appear to be of a very superficial kind, and it is the obvious differences between them that most naturally take our attention. Nevertheless a psychological study of the two manifestations discloses a far-reaching similarity between them in almost all respects; in fact the more closely one investigates the psychogenesis of them the more one is impressed by the extraordinary resemblances, and the more difficult does it become to define the essential differences between them. That the study of normal dreams is highly important, both for the understanding of all kinds of mental disturbances and for the treatment of the psychoneuroses, is growing more and more evident, and I shall presently touch on some of these practical aspects.

Our knowledge of the psychogenesis of both dreams and neurotic symptoms we principally owe to the laborious work of Freud, and I shall here largely confine myself to the exposition of some of his conclusions. He has dealt fully with the manifold problems of dream life in a book devoted to the subject,[1] and some five years later, in the Bruchstück einer Hysterieanalyse,[2] he illustrated in detail his views on the relationship between dreams and hysteria and showed the value of dream analysis for the elucidation of this neurosis. Properly to discuss the subject would necessitate giving, as a preface, a description of Freud's theory, but this task, on account of its extent, is obviously impossible in the time at my disposal. I can only refer

* An address delivered before the Wayne County Society, Detroit, May 15, 1911.

[1] Freud: Traumdeutung, 1900. 3te Aufl., 1911.

[2] Reprinted in the Sammlung kleiner Schriften zur Neurosenlehre, 2e Folge, 1909.

you to other writings on the subject,[3] and will here try to deal with the present theme in the form of a series of statements. These may be grouped under four headings, and I need hardly add that they will have to be far from exhaustive either in number or extent.

I. General Characteristics.

In the first place one might remark on the fact that both dreams and neurotic symptoms frequently appear to the lay mind to be remarkably meaningless, illogical, or even absurd. For instance, in a dream one may see a historic personage, say George Washington, talking familiarly to one's brother, and in a place that neither had ever visited. Similarly a neurotic patient, who in the ordinary way is courageous enough, may be seized with an irrational terror at the sight of some object for which he has a specific phobia, for instance, a cat. On a healthy person the incomprehensibility of such bizarre occurrences produces an unavoidable impression of unreasonableness, and he has an instinctive difficulty in taking either of them seriously, certainly in devoting to them that earnest attention which they really deserve. We describe this illogical or incongruous feature by saying that the occurrence in question cannot be related to the rest of the person's conscious thoughts; it is something apart, strange, and apparently quite disconnected. This statement is perfectly true, and the alternative hypotheses are either that such manifestations are in their very nature throughout bizarre and illogical, or that they are the product of normal logical thoughts, which for some reason have become distorted. Freud has produced evidence to show that the latter hypothesis is probably the true one, and that the obvious gaps between the occurrences and the rest of the person's mind can be filled in by bringing to light various thoughts that previously were unconscious.

[3] Ernest Jones: Freud's Theory of Dreams, Amer. Journ. of Psychol. April, 1910; A Modern Conception of the Psychoneuroses, Interstate Med., Journ. Aug., 1910, where bibliographical references are given. See especially Brill, Freud's Conception of the Psychoneuroses, Med. Rec., Dec. 25, 1909; Dreams and Their Relation to the Neurosis, N. Y. Med. Journ., April 23, 1910. The fullest analysis of a single dream is that recorded by Rank, Psychoanalytisches Jahrbuch., 1910, Bd. II, S. 465.

A further resemblance between dreams and neurotic symptoms lies in the conception of them that was until recently generally prevalent among scientific men, and which still widely obtains. This is based on the former of the two hypotheses just mentioned, the one that accepts the manifestations in question at their face value; it may be stated as follows. They are both disordered products of an imagination that is functioning improperly because of certain non-mental circumstances. In sleep, when the mind is at rest, various physical excitations disturb in an irregular manner different groups of brain cells, the result of which is the anomalous, fitful, and disconnected series of mental processes that we call a dream. In the psychoneuroses the same thing takes place, except that the physical excitations are of a morbid kind (due to malnutrition, toxins, etc.) so that we call the result a disease. In both cases it is denied that the manifestations are susceptible of a psychological interpretation, that they have a precise psychical history, or that there is any logical meaning behind the odd and inconsequent series of mental processes.

This familiar conception received a rude shock at the hands of Freud when he published his observations showing that, though dreams and neurotic symptoms have all the appearance of disorder and disconnectedness, this appearance is not primary, but is itself the result of the action of certain definite agents. The two manifestations are rather the *altered* products of mental processes that are entirely consequent and highly significant parts of the personality. By means of psychoanalysis they can be traced to their origin, when it becomes plain that they have a perfectly definite psychical history, and an entirely logical *meaning*. There are thus two main problems, first the nature and significance of the sources of the manifestations in question, and secondly the nature and significance of the alteration or distortion that these original mental processes have undergone before attaining their final appearance.

Both manifestations have a remarkable tendency to be forgotten. With dreams this is such a characteristic feature as to need no dwelling on; everyone who has tried systematically to recall his dreams will have noticed how treacherous is his memory of them, and what a usual occurrence it is for the remembrance of even a vivid dream completely to disappear within a few

minutes after waking. In the case of neurotic symptoms this feature is not so generally recognised, but careful observation shows that it is almost as constant, though not so pronounced, as it is with dreams. However detailed the anamnesis taken in the first few interviews with the patient one regularly finds later that it is incomplete and that all sorts of earlier symptoms have been ignored or forgotten. The same holds in respect to the duration of symptoms; patients almost always underestimate this. A typical instance is that of a patient who stated he had had trembling of the hand for the past three months, and never before; it turned out later that he had it for the past six months, and on two former occasions for two or three months each time. Further, the memory of dreams and of neurotic symptoms not only fades in intensity, but becomes distorted as time goes on. This occurrence is also better known in the case of dreams, where Freud has given it the name of "secondary elaboration." The memory of neurotic symptoms is similarly fallacious; different ones are misplaced in time, confounded with one another, and so on. The history of a neurotic illness laid bare after a prolonged investigation has often quite a different appearance from the incomplete and incorrect one given by the patient during the first interviews.

This curious tendency to forget and alter mental processes that at the time of their occurrence were so vivid as to absorb the whole attention of the person is certainly noteworthy, and in itself would suggest an inner connection between the two processes. We shall see that the significance of the tendency is the same in the two cases, it being a manifestation of the repression of underlying mental processes which are symbolised by both dreams and neurotic symptoms. The vulgar tendency to belittle dreams and symptoms, which was mentioned above, is also an expression of the same psychical force. Further, the two tendencies, to falsify the memory of the two manifestations, and to forget them altogether, have exactly the same psychological significance, both being results of the repressing force.

Dreams and neurotic symptoms show intimate psychological connections with superstition, both on the surface and in their essence. That dreams have always been a fruitful source of superstition is well known. Even at the present day belief in the

telepathic nature of some dreams, and in their service for foretelling events, is far from extinct. In most subtle ways dreams may influence the waking thoughts in a manner that can only be described as superstitious; I have recently published some striking instances of this.[4] It has been said that all neurotic patients are at heart superstitious, and although this is probably an over-statement, still with some forms of neurosis, *e. g.*, obsessions, the superstitiousness of the patients is quite extraordinary. One of my patients could not stand with his face to the north because it might bring some harm to his father, he could not cross the street without first counting eight, for otherwise ill-luck would happen to him, and so on. Cases of the kind are familiar enough.

The intrinsic relations between superstition and the two manifestations in question, though highly interesting, are too involved to discuss here, and I must refer you to the suggestive chapter on superstition in one of Freud's works.[5]

II. Clinical Relations.

It is not very rare for a neurotic symptom actually to date from a given dream, an occurrence first fully described by Féré in 1886. As an instance I may mention the case of a patient of mine who whenever he had a certain dream, to the effect that he was being hanged, always suffered for some time after from a hysterical paralysis of the right arm. In discussing this occurrence in a recent paper[6] I pointed out that it is incorrect to regard the dream as the *cause* of the symptom that subsequently arises. They both have a common cause in some buried thoughts. The process, however, is of considerable interest as showing that the same thoughts can come to expression in both a dream and a neurotic symptom, thus illustrating the near relationship of the two.

Certain neurotic symptoms even in their external appearance strikingly resemble dreams. In hysteria, for example, curious conditions occur which so resemble dreams as to be thus named. Lœwenfeld[7] gives the following description of them: "The

[4] Journ. of Abnormal Psychol., April-May, 1911.
[5] Freud: Zur Psychopathologie des Alltagslebens, 3ª Aufl. 1910.
[6] Journ. of Abn. Psych. Loc. cit.
[7] Loewenfeld: Ueber traumartige und verwandte Zustände. Centralbl. f. Nervenheilk. u. Psychiatr., 1909.

outer world fails to make the accustomed impression, things that are well known and which are seen every day seem altered, as if unknown, new, strange; or the whole environment gives the impression of being a product of the imagination, a sham, a vision. In the latter case especially the patients feel as if they are in a dream or a half sleep, as if they have been hypnotised or are somnambulic, and they mostly also speak then of their dream-states." Abraham,[8] who has submitted these conditions to a searching investigation, points out further resemblances they have to reveries or day-dreams, to twilight states, and to noctambulism. He finds that the condition passes through three fairly well defined stages, first, one of exaltation of the imagination, then one of dream-like withdrawal from the outer world, during which the environment seems unreal, strange, and altered, and finally a third, one of vacuity, in which the thoughts stand still and the mind seems a blank. The first two stages are pleasurable, the third disagreeable. His analysis of the content of consciousness during these stages shows that, like neurotic symptoms in general and also dreams, it represents the symbolic gratification of various repressed ambitions and desires.

The reverse occurrence to this is still more frequent, in which namely, a neurotic symptom appears directly in a dream. This is most often found with various fears; for instance, a person who is afraid of heights dreams that he is on the edge of a precipice and about to fall. In such cases the analysis of the dream furnishes a specially direct clue to the nature and origin of the corresponding symptom.

Not only may the superficial content (called by Freud the manifest content) of a dream be identical with that of a given symptom, as in the example just mentioned, but a dream that appears in no way to resemble any symptom may arise from the identical underlying mental processes that are the cause of a symptom from which the patient is at the same time suffering. The significance of this fact for the treatment of neurotic symptoms will be dwelt on later.

[8] Abraham: Ueber hysterische Traumzustände. Psychoanalytisches Jahrbuch, 1910. Bd. II, S. 1.

III. Structure.

Recent impressions, often in themselves quite trivial, are adjuvant factors in the production of both dreams and neurotic symptoms. Most observers have noticed how frequently casual recent thoughts and impressions, which passed unnoticed at the time, are met with in dreams, and Freud has found that in every dream there is represented some mental process, either trivial or significant, of the day before. Similarly neurotic symptoms often owe their occurrence to some recent and often trivial impression, such as the reading or hearing about a given illness, a slight shock, grief, or fright. In both cases there is a considerable tendency, on the part of both the observer and the person concerned, to regard this recent impression as the cause of the dream or symptom. Strictly speaking it is never more than the exciting cause, which acts by evoking a manifestation of deeper and much more significant mental processes.

Both dreams and neurotic symptoms are a compromise-formation, being produced by the interaction of two opposing sets of forces. One of these, the real source of the dream or symptom, is composed of certain buried mental processes, called by Freud the "latent content," which have a strongly marked dynamic or conative trend. The actual characteristics of this latent content will be pointed out in the next section. The other set of forces, called by Freud the endopsychic censor, consists of various social and ethical inhibitions, the function of which is to prevent the passage into consciousness of the mental processes, comprising the latent content. In other words, the latter consists of thoughts, desires and wishes of a kind that are highly unacceptable to the conscious personality, and which, therefore, have been repressed into the unconscious; the patient has great difficulty in admitting their existence, sometimes even in conceding the possibility of their existence. The dream or symptom is thus an allegorical presentation of the latent thoughts. These cannot come to direct expression, so they are hinted at by means of circumlocutions, euphemisms, and metaphors quite analogous to those in which we hint at forbidden themes in polite society. This is the meaning of the distortion referred to above. When the distorted product is resolved into its elements, when the underlying mental processes are unravelled, and the latent content laid bare, it is always found that they have a perfectly definite and logical

meaning, and furthermore that they are always of an intimate nature and of high significance to the personality. Whatever the superficial appearance of a dream or symptom may be, the underlying causes of it are never trivial. The following simple dreams illustrate this conclusion.[9]

(1) A woman, aged thirty-one, dreamed that *she met a Mrs. R., who invited her to come and take a bath together.* This is not so senseless as it appears. The associations supplied by the patient were as follows: "Mrs. R. is about to be confined. I helped her sister once at her confinement. That is supposed to bring luck. It is one of the things done to cure sterility. After her confinement I bathed together with her for the same reason (a Jewish superstition). To have a child is my dearest wish, especially as my husband and my women friends despise me for my childlessness, and taunt me with it. I have been to many doctors, and had two operations, but so far nothing has helped."

(2) A girl of twenty dreamed that *she and her sister were to get $150 for diving from the roof of an aquarium in public. A friend who was present remarked that the sister was being badly paid for her work, which was precarious, and the patient replied: "Well, you know, we can always dive."* The patient was very fond of diving at the baths, an act which gave her a markedly voluptuous sensation. All that the sum of $150 reminded her of was that when she was fifteen a man friend took her out for the evening, repeatedly kissed her, and on saying good-bye put $1.50 into her purse to buy some chocolates with, adding: "I wish I could afford to give you a hundred times as much." The sister was at the time the paid mistress of a certain man. The dream is thus a fairly open expression of the girl's realisation that the same avenue for earning money was open to her.

(3) The same patient dreamed that *an Angora cat was restlessly moving to and fro in a room. Presently he struggled to reach a window and then jumped out on to the street.* She described it as an awful nightmare, from which she has waked with a feeling of paralysis in the legs. She owned an Angora cat, which was "very beautiful and graceful, with blue eyes." She herself was pretty and graceful, and had blue eyes. She

[9] As with all the other examples given here, no attempt is made to render the full analysis. The patient's contributions and my own interpretations, however, are kept distinct from each other.

identifies herself with her cat, and projects on to him thoughts that really concern herself. The cat was fond of standing at an open window, enjoying the air. Late one night he alarmed her by jumping through it and escaping. Her sister laughed and said, "He has gone to lead a gay life on Broadway." She replied, "Yes, cats can go out at night whenever they like, but we can't, we should only be called fallen women."

This dream illustrates one of the causes of the frequent fear of falling, which may occur as either a symptom or a dream, physical and moral falling being unconsciously associated, so that the former can symbolise the latter.[10] Another dream of the same patient's shows this even more plainly. (4) *She stepped out of an upper window, picked up an umbrella that was lying there, opened it, and dropped to the ground. She fell on to the cellar steps in the front of the house. A man picked her up, and they went down the street together.* On the previous day she had annoyed her father by borrowing his umbrella. The thought of a raised umbrella first reminded her of balloons, and that a friend of hers had recently made a balloon ascent with her husband (a noted aviator) on their honeymoon; then of a Zeppelin shaped balloon filled with candy, that a man friend had just given her. She had wondered whether a Zeppelin balloon was sharp enough to penetrate one of the ordinary shape if there was a collision. Finally it became evident that an opened-up and raised umbrella was associated in her mind with the erect male organ; in fact she had heard jokes in which the two were compared. As to the cellar entrance, she was struck by the curious fact of this being in the front of the house in question, instead of at the side, as it is in real life. The house was identified with herself and her own body, as is so naturally the case with women, to whom the home is an integral part of themselves. That the lower entrance to it symbolised the site of her (moral and physical) fall on the street, (in which she was aided by a raised umbrella and a man), is quite intelligible. Going together with a member of the opposite sex (especially on the street) has long been a metaphor for the sexual act; indeed, the word coitus itself is derived from coire—to go together. The three dreams thus

[10] This is illustrated in the old proverb: "When a maiden falls, she falls on her back."

represent the wild *demi-mondaine* instinct that with many ardent women slumbers at the back of the mind.

The individual details of the mechanisms [11] by means of which the latent content becomes transformed into the disguised manifest content are strikingly similar with dreams and neurotic symptoms. One of the more obvious of these is that known as "condensation." Every single feature of a dream and of a neurotic symptom representing more than one group of mental processes, is, as Freud expresses it, "over-determined." One can never talk of *the* cause, for there are always numerous co-acting agents. Each feature is a highly condensed symbol of an extensive series of other thoughts, a fact which renders the full exposition of the structure of any dream or symptom a matter of great practical difficulty. Thus in a dream a given strange figure may be formed by the fusion of attributes taken from several different people, the result being a composite person; the same applies to all other elements of the dream. Sometimes the extent to which the condensation is carried is quite extraordinary. The analogy between the neologisms that occur in dreams, and those so frequent in insanity, has often been commented on; the genesis and structure of them is similar in the two cases. In the neuroses neologisms are relatively rare; they are chiefly met with in the compulsion-neurosis. The following is a simple instance of condensation, in the dream of a homosexual patient.

(5) He dreamed that *a man, whose name seemed to be Lysanias, was advancing towards him.* Of the name he said that nothing was known of it beyond the fact that it is mentioned in Luke iii. 1. as that of a tetrach of Abilene; it should be said that the patient was a professional Bible-reader. Remembering, however, that nothing occurring in a dream is without significance, I asked him to supply free associations to the name. It brought the words lyceum and licentious; his school (not in this country) was called a lyceum. When a school-boy, he had been in the habit of resorting to an abbey ruin in the neighborhood, for the purpose of indulging in sexual practices with an older boy called Leney. The name Lysanias, (tetrarch of Abi-lene), therefore, expressed the fact of his having been *licentious* when at the *lyceum* by going to the *abbey* with *Leney*. An isolated instance

[11] See Amer. Journ. of Psychol., April, 1910, for an account of these complex processes.

of this sort may be due purely to coincidence, in spite of the immediate associations furnished by the patient, but when we find similar occurrences in every dream without exception that is submitted to analysis it becomes extremely difficult to regard this explanation as adequate.

Another equally prominent mechanism in both dreams and neurotic symptoms is that known as "displacement." By this is meant the replacement of one idea by another, more satisfactory or acceptable; the affect belonging to the original idea is displaced on to the second one. The directing of interest away from forbidden thoughts into the sphere of sport is an instance of this mechanism, which plays a large part in everyday life. It is one of the ways in which the symbolism is brought about, that is so constant a feature in dreams and neuroses. Displacement is illustrated in all the dream examples here related; further instances are the following:

(6) The last-mentioned patient dreamed that *he was at the side of a dirty looking, sluggish river. He seemed to know that the Sanitary Inspector had said it was full of disease germs. The banks were covered with silvery, irridescent, fishes' eggs. A gigantic dog-fish raised itself out of the stream and attacked him.* The river reminded him of the River Wey, which gave the associations: milky-way—curds and whey—semen (germ). Fishes' eggs always made him think of drops of semen (masturbation). He had a morbid repugnance for all fish, finding them loathsome. A boy, with whom he had had sexual relations in school (the patient playing a passive part), was nicknamed Fishy, on account of his large mouth and fish-like eyes. As to dogs, he had had a terror of them ever since one had bitten him badly when he was gratifying his sexual curiosity with it. The whole dream thus symbolised a sexual attack of a kind he had now come to regard as repulsive.

(7) A woman, aged thirty-five, dreamed that *she was driving in a trap with a tall, dark man. The horse was a bay. They came to a level crossing and saw a warning notice with only the word "near" on it. A train came dashing along. The man tried to cross, but the horse refused and turned round just in time, thus saving them.* The man recalled to her a cousin who had once proposed to her when out driving. The word "near"

made her think of "a near relative." She thought it wrong to marry a near relative, on account of the risk to the children, and for this reason had refused her cousin's offer, although she was very fond of him. The bay horse reminded her of one she was greatly attached to as a girl, and which was named after her; also her own name before marriage was Bay. In the dream she thus identifies herself with the horse, who saves them from disaster.

It is impossible for me to go here into further detail in regard to these various mechanisms, and I will only add two further remarks on the subject. The mechanism of inversion is an extremely common one in both dreams and neurotic symptoms. The inversion may concern either space or time. For instance, the second part of a dream or of a hysterical attack, may represent the first part of the logical underlying thoughts. The other matter is that the affect in both dreams and symptoms is always true. If a patient has a morbid fear of a trivial object, either in a dream or when awake, this fear is always justified in fact; that is to say, there is some associated object in real life that he has every right to be afraid of. The unreasonableness arises only through the fear having got displaced on to a trivial associated idea; the person dares not admit to himself of what he is really afraid. For instance, a woman patient of mine, having every reason to be afraid of a certain treacherous object that has the capacity of penetrating the body, with dangerous results, contracted a phobia of—knives. To laugh at neurotic patients for their "ungrounded" fears is to display a complete ignorance of the significance and genesis of the symptom.

IV. Latent Content.

The associated ideas obtained by any careful study of dreams lead one at first to a number of mental processes that have taken a share in building the dream. Up to the present, however, it has not been found possible to reach the true latent content or underlying meaning of dreams by the use of any other method than the psychoanalytic,[12] a method which like other complex procedures has its own technique that required to be carefully

[12] This fact was clearly, though inadvertently, illustrated by Morton Prince in his recent paper on dreams. Journ. of Abnormal Psych., Oct., 1910.

learned. The material obtained by more superficial studies is found to be quite heterogeneous, and the conclusion may hastily be reached that the latent content has no characteristic features, that any kind of mental process, a fear, anxiety, wish, and so on, can give rise to a dream. On the contrary, the true latent content that lies behind this material, and which is laid bare by psychoanalysis, is found to be specific and homogeneous, and always has certain definite and characteristic features. The preceding remarks apply equally as well to neurotic symptoms as to dreams. The features common to the latent content of both are as follows:

1. The latent content is always unconscious,[13] that is to say, it consists of mental processes unknown to the person, and of which he cannot become aware by direct introspection but only by means of certain indirect modes of approach.

2. These mental processes are never indifferent to the person, but are highly significant, and have been repressed into the unconscious on account of their being unacceptable to the conscious mind.

3. The latent content is of infantile origin, later additions being merely reinforcements of earlier infantile trends. The following is an instance of how infantile material can lie behind an apparently meaningless dream.

(8) The last-mentioned patient dreamed that *she was pregnant, and that she was suffering from nausea. She thought to herself, "surely the baby is not coming out this way."* Analysis of the dream led to long-forgotten infantile thoughts, in which she had imagined conception and child-birth to be processes analogous to the ingress and egress of food, and taking place at the same alimentary orifices. The hysterical vomiting (æsthetic disgust), from which she suffered in waking life, originated in the same buried complex.

4. The latent content of both dreams and neurotic symptoms is usually of a sexual nature. Freud long ago came to this conclusion so far as the neuroses are concerned, but it is only of late years that he has ventured to make the same generalisation in regard to dreams. It should be remembered that this statement refers principally to the infantile form of sexuality, which

[13] For a definition of this term and allied ones, see Psychol. Bull., April, 1910, p. 111.

differs widely from the adult type.[14] I am aware that this generalisation, like all other new ones, is bound to give the appearance, to those who are shocked by its strangeness, of being an obvious exaggeration, but it is a matter that can only be settled by facts, not by preconceived opinions; so far as my experience goes the facts conclusively point to the truth of it. To the other examples of it I have already related the following may be added:

(9) A patient, aged thirty-three, dreamed that *she was in a bath-room, and that an enormous spider, with huge legs, kept falling on to her and entwining itself around her. She called to her son for help, and endeavored to get the spider into the bath, which was made of tin.* The spontaneous and quite unprompted associations to the elements of this "harmless" dream were as follows: Her mother-in-law had a tin bath the surface of which she was fastidious about keeping immaculate. The patient's son, a boy of eight, had recently soiled and scratched it by standing in it with his boots on. She used to find very repugnant the maternal duty of taking her boy, when a baby, to the bathroom for other purposes. The word "tin" brought to her mind the word "nit." (The frequency with which reversal occurs in unconscious mentation was mentioned above; it is an interesting subject, which deserves a special discussion.) She had suffered badly from nits when at school, and had often to be taken to the bathroom to have her hair treated; the experience had caused her great disgust. The enormous spider called to her mind her husband, from whom she is separated. He is an unusually big man; she loathed his embraces, which gave her the feeling of being grasped by a spider. After them she used to take not only a douche, but a full bath, to wash away any traces of his contact. She had been in the habit of calling her son to her room to protect her whenever she found her husband's embraces quite unendurable. The dream thus discloses itself as a disguised reminiscence of very intimate experiences.

The following is an example of a bisexual dream, in which, namely, the actor plays both a masculine and feminine part.

(10) The patient, a farmer of twenty-four, dreamed that *he saw an immense lion. His feeling was that it had been a family pet, but that as there was a latent danger about it he ought to*

[14] See Freud: Three Contributions to the Sexual Theory. Transl. by A. A. Brill, 1911.

shoot it. The rest of the family did not seem to appreciate the danger or to agree with him that it was necessary to destroy the animal. His mother appeared on the scene, weak and ill, as she had been the year previous to her death. She was quite indifferent to the danger, and he could not understand this, especially in view of her weakness. With difficulty he persuaded her to let him lead her out of the danger zone. Then his father appeared, who though dubious about the necessity of taking any action, began to load a rifle. The patient now became more apprehensive, doubted his capacity to tackle the animal himself and decided to leave the job to a more reliable marksman, namely his father. After a consultation they called to their assistance their dog. He and his mother had to prepare the dog for the fight, and this now turned inexplicably into a small lion, the other animal disappearing from the scene. The preparation consisted in fitting top-boots on to the new lion's feet, and at his mother's suggestion he tried to do this. He succeeded with one boot, though not so as to satisfy the lion. The next one was still more difficult to get on, but he managed to get it on by means of swinging the foot to and fro inside it. This movement irritated the lion, which seized his head and crushed it. The patient's feeling was one of mixed apprehension and submission. A later addition: *in the first part of the dream the animal was half a lion and half a snake; it had definite features of both these, the tail and hind parts, for example, having altogether the appearance of a snake, the head being half leonine and half snake-like, the teeth and claws being leonine, and so on.* It thus resembled the fabulous monsters of mythology, creatures probably also born of dreams. To connect this bizarre dream with the waking thoughts of a young Canadian farmer, and to regard it as an expression of his psychosexual life, may perhaps seem a gratuitous and not very hopeful undertaking, but even the few facts I can here relate may show that it is far from impossible, as indeed the full analysis proved. The lion, with its half-menacing, half-undecided expression, at once recalled to the patient his father, whose head and cast of features have a strikingly leonine appearance. (This resemblance in the father both I and a common acquaintance had previously noticed quite independently of the patient, to whom I had never mentioned it.) The thought of a snake also brought to

his mind his father's cold, beady eyes, and his insinuating "sneaky" manner of getting his way when he was not in a position to bully; in outbursts of anger the patient had frequently called him a snake. He was constantly on bad terms with his father, and the troubles that resulted constituted the main symptom for which he was being treated. He had always slept with his father, and when the latter went into the mother's bedroom, which was divided off by a board partition, the overheard sounds caused in him both physical excitement and jealousy.

The dream expresses four phantasies, an auto-erotic, a feminine, a masculine, and a bisexual. The top-boots that he was fitting on to the lion's foot (an ancient phallic symbol) represented a condom, which he had worn when masturbating, so as to heighten the illusion of the imagined vagina (sheath); it also reminded him of a snake-skin. In being attacked by the lion-snake he played a feminine part. The contact of his father's penis in bed had always excited him; he had frequently compared the appearance of it to a snake and had woven all sorts of grandiloquent phantasies about it. As a boy of nine he had pictured to himself, half-fearfully, half voluptuously that there was a large snake in his bed, and later on had suffered from the fear that a snake might creep into his mouth or anus when he was asleep out of doors. The snake was also—which is rare—a female symbol. He had compared his father's long face, evenly divided by a long nose, to the female parts, an analogy strengthened by the unusual whiteness of the face, for as a boy he had pictured the vagina as being white "like the abdomen." This conception of a snake as a female symbol came to open expression in attempts he had made to effect sexual intercourse with a real snake! In the dream his protection of his mother from the large animal (the father, the dangerous family pet) and his co-operation with her in handling the small one (himself) shows him in a masculine part. In real life he had in fact remonstrated with his father for going to the mother's room against her will when she was weak and ill. The conclusion of the dream represents a mixed, bisexual phantasy. The crushing of the head between the lion's jaws brought the following associations: a frog in the jaws of a snake—a boaconstrictor he had seen swallowing a mass of raw beef—gripping his penis in the act of masturbation—a game he used to play with an older boy, which consisted in getting the

latter to grip his head between his thighs"; it felt like having one's penis held tight (the head is a well-known phallic symbol). This theme was connected with both masochistic and sadistic phantasies, though principally the former.

It is probable that most dreams, just as neurotic symptoms, are connected with infantile incestuous wishes. These came to fairly evident expression in the dream just related, as also in the next one.

(11) The patient, a girl of twenty-three, dreamed that *she was walking alone in a dark thicket. She thought how terrible it would be to meet a negro there, as she was unprotected. One appeared armed with a pickaxe and grabbed her by the arm. She struggled to escape, but thought to herself that "it would not be so terrible if she were to collapse." She reached a high board fence and pushed open a door, which had rusty nails.* The patient was a Southern girl, who from a child had never been allowed to go out without carrying a revolver. The association between negroes and rape was naturally a very close one in her mind. She had "a horror of anyone being killed on her account" (the fear covering a repressed wish), and recollected several instances of lynching near her home. The association between sexual relations and violence was in general very intimate. As a child she had frequently overheard conjugal acts on the part of her parents, and had interpreted them as a violent sexual assault; the fact that her parents often used to quarrel fiercely, her father striking and wounding her mother, no doubt contributed to this conception. The grabbing of her arm in the dream brought to her mind an occasion in which she had tried to defend her mother, and her father had roughly seized her by the (same) arm, violently twisting it. The negro in the dream at once reminded her of her father, the short white beard, the working-clothes and pickaxe, as well as his build and movements, being exactly the same. The fence recalled one of the same appearance as in the dream, in front of which she had, when a girl of fifteen, seen a man exposing himself; she had "absent-mindedly" stopped and asked him if he wanted to speak to her. The rusty nails brought back the fence at her home, which "it wouldn't take anything to break down." Further dreams, in which her father stabbed her or her mother with a knife, etc., showed that in her repressed imagination she had identified her-

self with her mother, and wished that her father would commit the same kind of assault on her as on her mother; in fact she was constantly, and in the most wanton way, provoking disagreements and quarrels with her father. In the course of the treatment the patient fully realised, and confirmed by recalling a number of forgotten memories, the incestuous origin of her family troubles; since then she has been on excellent terms with both her father and mother.

5. The latent content of both dreams and neurotic symptoms consists of an imaginary gratification of one or more repressed wishes. As was previously mentioned, all kinds of other material may enter into their composition, and wishes that are not repressed frequently find an imaginary gratification in them, but the latent content itself is always a repressed wishfulfilment.

Of all the relationships between dreams and neurotic symptoms the most important practically is that in many cases the latent content of both is identical; that is to say, the mental causes (repressed complexes) of a neurosis will sooner or later come to expression in the patient's dreams. Before discussing the corollaries that follow from this fact I will further illustrate it by some more instances.

(12) This example is taken from the same case as (7) and (8). One of the patient's chief symptoms was a feeling of powerlessness, at times amounting to a complete paralysis, in both arms. This was at first manifested only while playing the piano, a recreation of which she was particularly fond. She dreamed that *she was in a large hall. At one end, opposite to her, was a maroon-colored church organ. There were several upright pianos, and one baby grand piano, at which she was playing. Her boy was kicking at it from the side, and she reproved him, saying, "You ought not to abuse such a beautiful instrument."* The free associations to the elements of this dream were: Organ. "I don't know why it was maroon-colored, for our organ is painted grey. I have always been passionately fond of organ music. To hear it gives me a delicious soft feeling. I used to get into the church alone, and try to play on the organ. (Pause). The word is also used for a certain part of the body." Reproving the boy (who was nine years old). "I have been greatly exercised of late lest he might acquire any bad habits in school as I did at his age (masturbation), and last week spoke

to him on the subject; I used words almost the same as those in the dream." From these and other associations it was not hard to infer that the acts of masturbation and of piano-playing had become unconsciously associated in her mind. I told her so, and she answered, "Well, I didn't tell you that when I woke from the dream I found I had been doing it in my sleep." This proved to be an important step in the discovery of a number of thoughts, phantasies, and incorrect ideas relating to masturbation, all of which were concerned in the genesis of the hysterical paralysis; roughly put, her loss of power in piano-playing, which gradually extended to other functions, was from one point of view a punishment for playing with her fingers in another, forbidden direction.

(13) The following example is taken from the same case as the last. *She was seated at a table which was covered with food; the table was made of rough boards as at a picnic. She played in this food as though on a piano. Her fingers got unpleasantly sticky, and covered with some stuff that seemed like either fine hay or shredded wheat.* The rough board table reminded her of picnics she used to go to when a young girl; she used to play see-saw with a boy-cousin on a board taken from the temporary table, and this used to cause genital excitement. The latter idea brought to her mind other similar onanistic acts (on chairs, steps, etc.). Stickiness was associated with both this and the idea of semen. Fine hay called to her mind the hen-nests in which she used to search for eggs, and shredded wheat the threads of babies' clothes. There are thus two themes, masturbation and conception. These were connected in her mind by the curious belief she had held as a girl that illegitimate pregnancy might result from masturbation. Fears in this direction had made her life a misery for several years till at the age of seventeen she learned the truth; in the preceding dream the belief was indicated by her playing on a "baby" piano (a baby and the part of the body where it is born are often unconsciously associated). The connection with food dated from a much older complex. When a child of five she had developed the idea that babies grew from food taken into the body. Her vomiting symptom arose from this complex, as was remarked in example (8). The dream is thus a condensed biographical account of her views and experiences on the subject of sexuality and child-birth.

(14) The patient, whose history I have elsewhere related,[15] suffered from an anxiety condition with pronounced gastric symptoms. She dreamed that *she was going to the beach to bathe. On her way she stopped to buy some milk. They gave it her in several bottles; all these were white, except one, which was violet colored. When she reached the sea a small boy ran out of the water to meet her.* The dream represented a birth phantasy, as many dreams do in which a child emerges from the water.[16] In the preparation for the event it was only natural that she should need a quantity of milk, but the curious circumstance of one of the bottles being violet-colored needs an explanation. Nothing in a dream is without import, and this instance is a good example of how an insignificant feature may be connected with the most important underlying thoughts. The immediate associations were: "violets are my favorite flowers; my husband's poison bottles (he was a doctor) were blue; in milk shops I have never seen blue or violet bottles, but they sell buttermilk in brown bottles; buttermilk was prescribed for my stomach trouble and I loathe it, it nauseates me." It is possible that the violet color was composed from a mixture of the blue and brown; at all events we shall see that the corresponding ideas are intimately associated with one another. Like the last-mentioned one, this patient also had constructed an infantile hypothesis of pregnancy on the view that the baby grew in the abdomen out of food, but, keener than her, she had surmised that some special substance had to be added to the food to fructify it. On the analogy of the mixing of urine and fæces, and of the watering and manuring of vegetation, she inferred that the new substance was a fluid, and as the doctor was concerned in the matter she concluded it must be some kind of medicine. Throughout her childhood she had a remarkable fascination for medicines, and drank all she could get at. In later life she acquired a loathing for any medicinal substance that in any way resembled the appearance of semen, the infantile complex being now buried; instances of this were buttermilk, flax-seed emulsion, and koumiss, all of which were forced on her with the object of bettering her stomach trouble. As to the blue poison bottles of her husband (who, it must be remembered, was a doctor), it turned out that

[15] Journ. of Abnormal Psych., June, 1911

[16] See Amer. Journ. of Psychol., April, 1910, p. 296.

poison (a medicinal fluid which when swallowed produces serious effects) also belonged to the same group of ideas; it is this association that is at the basis of the common delusion of insane patients that they are being poisoned, *i. e.*, that a certain fluid is being forced on them against their will. The same association is the explanation of the old beliefs in ambrosia, nectar, love-potions, and other magical drinks. A flower or bud was in her dreams a common symbol for a baby, as it is in poetry; the violet color in the dream was thus greatly over-determined. It need hardly be said that the insight gained into the nature of the psychogastric symptoms from the analysis of this dream alone was of considerable value for the question of treatment.

The importance of the fact that the latent content of many dreams is identical with that of the neurotic symptoms from which the patient is at the same time suffering is a twofold one, it being equally significant for pathology and therapeutics. A knowledge of the nature, mechanisms, and meaning of normal dreams is indispensable for the understanding of the manifold problems of the neuroses, and also, it may be added, of the psychoses. An adequate study of these problems is only possible when the unity of the laws applying to both normal and morbid processes is appreciated, and nothing demonstrates this unity more clearly than the study of dreams. Through it one realises that the same forces are at work in the normal, in the neuroses, and in insanity, and that there is no sharp line dividing any of these. Not only is the principle of cause and effect just as rigorous with bizarre morbid manifestations as it is in normal mental life, but the various psychological laws according to which it operates are precisely the same in both cases. Further the study of the patient's dreams is the readiest and most direct route to the unconscious, where the conflicts are taking place that form the basis of the surface symptoms; it is therefore of prime importance for the investigation of the individual pathogenesis.

For therapeutics the study of dreams is of the greatest value in two ways. First, the deeper knowledge and comprehension of the sources of the disorder must of itself put one in a better position to deal with them. In few maladies are the pathogenic factors so darkly hidden as in the neuroses, and many modes of treatment (*e. g.* persuasion) can only be described as a blind fight with unseen foes. When the morbid factors are appre-

ciated and precisely defined our power of managing them is considerably increased. Secondly, the mere carrying out of the dream analyses is a therapeutic measure of very great value. To understand this curious circumstance one has to remember that the cause of a neurosis does not reside in the material that is repressed so much as in the fact that this *is* repressed. The conflict between the repressed wish and the opposing resistance of the censor is the essential matter, and the symptoms constitute a compromise between these two forces; from another point of view it may be said that they are symbolic expressions of the repressed wishes. Now if the resistance of the censor can be sufficiently overcome (as has to be done in a dream analysis) to permit the fusion of the two groups of conscious and unconscious processes that previously were kept apart, so that the patient realises the thoughts that he had previously kept from himself, then a symbolic compromise-formation (symptoms) becomes superfluous and indeed impossible. This principle is the essence of the psychoanalytic method of treatment.[17] All those who carry out this treatment are in fact agreed that the most valuable part of it lies in dream analysis. One can often treat a case of neurosis by dream analysis alone, attaining a complete cure thereby.

After having dwelt on the resemblances between dreams and neurotic symptoms it becomes desirable to point out some of the differences between them. The most obvious of these is of course the fact that dreams belong to normal phenomena, neuroses to abnormal. On this matter, however, there is a great deal to say. In the first place, certain dreams are decidedly pathological in nature. For instance, nightmares[18] and other severe anxiety-dreams occur only in subjects who show other evidences of an anxiety-neurosis (commonly included under the heading of neurasthenia), and there is reason to believe that increased knowledge of dreams will prove that certain types are indicative of definite forms of neurosis or insanity. Then, again, some neurotic symptoms, *e. g.*, the hysterical dream-states previously referred to, are hardly to be distinguished from dreams in either their nature or their appearance, and others, as was mentioned

[17] See a paper on this subject in the Journ. of Nerv. and Ment. Dis., May, 1910.

[18] Ernest Jones: On the Nightmare. Amer. Journ. of Insanity, Jan., 1910.

above, actually originate in dreams. Most significant, however, is the circumstance that both dreams and neurotic symptoms arise from the identical mental material, and by means of identical psychological processes. The repressed wishes that the neurotic finds necessary to express in external symptoms is expresed by the healthy person in dreams. The two are merely different ways of obtaining an imaginary gratification of the same buried wishes. One may in fact describe dreams as the neurosis of the healthy, just as a neurosis is a dream of the invalid. Further the healthy person is, strictly speaking, never normal. Freud [19] has shown that the buried desires in question come to expression in health in a variety of manifestations, absent-minded acts, forgettings, slips of the tongue or pen, and so on, the psychological mechanisms and significance of which are exactly similar to those of neurotic symptoms. We thus see that in many respects consideration of dreams furnishes a very uncertain criterion to separate health from disease.

An almost equally obvious distinction is that dreams belong to sleep, and neurotic symptoms to waking. Here also we are on unsure ground. Many neurotic symptoms, *e. g.*, night terrors, noctambulic wanderings, nocturnal paralyses, certain kinds of nocturnal epileptiform fits, definitely belong to the region of sleep, and others, such as various automatic and twilight conditions, occur in mental states that are hard psychologically to distinguish from sleep. On the other hand there is a most intimate connection, both in essence and appearance, between night-dreams and day-dreams or reveries. Some of the most typical dreams, particularly night-mare, occur by day (day-mare) as well as by night, and in all stages between deep sleep and full waking; often the subject is quite unable to tell whether he was awake or asleep at the time or in an intermediate state halfway between the two.

An interesting feature of dreams is their pronouncedly visual character. Most dreams, though by no means all, show this to a high degree; in a dream we see things before us as on a stage. This feature is exceptional in the neuroses, though it finds its counterpart in hysterical hallucinations; in insanity hallucinations are of course common enough, and indeed even in health they are not exceedingly rare. In analysing the psychogenesis of

[19] Freud: Zur Psychopathologie des Alltagslebens, 3ª Aufl., 1910.

hallucinations Freud and Jung have found that it proceeds by the same symbolising mechanisms, and that the content of them is just the same, as in dreams; indeed the relationship between insane symptoms in general and dreams are so close that one can with quite fair accuracy define an insanity as a dream from which the patient has not awakened. Freud's explanation of the sensorial nature of hallucinations is the same as his explanation of the "regression" that is the cause of the visual feature of dreams.

Conscious mental processes play a greater part in the subsequent remodelling of dreams than of neurotic symptom. This is a statement, however, that requires much modification. In some dreams the "secondary elaboration" plays no part at all, whereas in some forms of neurosis, particularly the compulsion-neurosis, it plays an extraordinarily important part.

Consideration of the apparent differences between dreams and neurotic symptoms, therefore, leads us to the same conclusion as consideration of their resemblances to each other did, namely, that the relationships between the two are far-reaching in extent and in significance. The truth of Freud's conclusions as to the nature and mechanisms of unconscious processes is strongly confirmed by their validity being demonstrated in two regions of mental functioning apparently so disparate as dreams and neuroses. He has produced evidence to show that the same principles hold good in even more distant fields, namely, in the origin of many forms of criminality, in the formation of myths, fairy-tales, folk-beliefs and superstitions, and in the creation of literary and artistic productions. In all these the driving force comes from the unconscious, all are essentially methods of an active phantasy for stilling ungratified desires, the psychological mechanisms changing, disguising, and distorting the primitive childhood tendencies are the same, and with each it is probable that the sex instinct is of fundamental importance. With right could one of our greatest psychologists say:[20]

> Lovers and madmen have such seething brains,
> Such shaping fantasies, that apprehend
> More than cool reason ever comprehends.
> The lunatic, the lover, and the poet,
> Are of imagination most compact.

[20] A Midsummer Night's Dream. Act V, Sc. 1.

ANNUAL ADDRESS.*

By HON. ALVA ADAMS, Pueblo, Colorado.

No doubt many of you will be disposed to have an alienist interview the committee who selected a layman to talk to this convention of physicians. Amateurs cannot instruct and never should give advice. My knowledge of the healing art is as superficial as a millionaire's conception of true charity and my views as unreliable as the scales of the Sugar Trust. Men are lame in any line of action upon which they never think and which they never practice. The critic disdains to practise what he preaches and he seldom thinks—that is why criticism is the easiest of all trades. It requires less capital than a political insurgent. One ounce of doubtful fact mixed with a pound of venom and a gallon of prejudice can paint black the fairest and most colossal reputation.

The army of fault finders travel with light baggage, they build no arsenals, they have no commissary, their ammunition is of the phantom sort that requires no wagon trains. Even the philosopher and critic of East Aurora, with all his rhetoric and all the paper bullets his phrase factory can make, has made no impress upon the citadel of professional rectitude that the labor and sacrifice of honest doctors have built. Dr. Norman Barnesby has just issued his book "Medical Chaos and Crime." It is a night mare, a horror, as crimson with slaughter as the deadly bend at Spottsylvania. It is an assault upon public confidence, it robs suffering mortals of the faith so necessary to every curative system. It places every physician under suspicion in the public mind. The incidents mentioned may be true. Anything is possible where laws are lax and diplomas are obtainable by correspondence for $25, as they have been during the past twenty-five years. It is easy to fill a book with cases of malpractice. Ignorance and stupidity kill more people than a Mexican army, but every doctor is not a butcher, and it is a serious thing to place a noble profession under

* Delivered at the sixty-seventh annual meeting of the American Medico-Psychological Association, Denver, Colorado, June 21, 1911.

indictment because a few promote chaos and crime. As well declare all bankers are thieves because a few should be in jail, or all preachers fools because one now and then proves weak and foolish like other men. The doctor, the priest, and the philosopher have ever been the target of the cynic. Satire, however, can never destroy the world's reverence for the good doctor. There are plenty who are too ready to cut, too willing to physic. There are still Dr. Sangrados, with their black bottle with its shot-gun mixture, fakirs with their leeches, purges, and quackery, but thank God there are thousands of earnest, self-sacrificing efficient doctors to whom altars of gratitude have been reared in the thousand homes where they have ministered. McLaren's Dr. Maclure was a penticostal character. All who have touched the rural life of our country have known unselfish doctors who might have been the prototype of the immortal Scotch doctor. Many American communities have been enriched by doctors as useful in their way as was Balzac's country doctor who raised the French peasant from buckwheat to rye, from rye to white bread, from degradation to self-reliance and manhood. We will not accept Bernard Shaw, Elbert Hubbard, or even Dr. Barnesby as our medical guides.

For many wrongs, blunders, and fatalities of crude, inefficient, ignorant practitioners, the more legitimate and competent physician is often a moral " particeps criminis."

An exaggerated conception of professional etiquette too often induces a doctor to stand by a professional brother to the point of perjury. A false idea of loyalty covers the mistakes, accidents, and blunders of incompetency. A conference is often little less than a conspiracy to protect a doctor from punishment for criminal negligence or ignorance. This is not courtesy, it is crime. We owe more to the community, to our fellow men, than we do to etiquette. No physician can be infallible. Not since the Savior made the blind to see and the lame to walk has any mortal been able to cure at will, but surgery is not a guess, medicine is not an experiment; both are sciences interwoven and interdependent. Knowledge of anatomy, of " materia medica " of disposition, temperament, and human nature are fundamental. Conscience is also a prime attribute in the genuine physician. Possessing these elements does not exempt from the duty of exposing imposture. A wall full of diplomas or high-sounding names should not protect

or shield the charlatan. There should be no close season for the quack and the skilled conscientious physician should be the first to go gunning for that sort of criminal. All the machinery of government is utilized to run down the petty thief and swindler, but those who violate the sacred confidence of the home and trifle with the lives of loved ones, go free and unmolested. These pretenders rely upon the silent lip of professional etiquette, and upon those periodicals which for pay spread their web of false and delusive promises before a weak, ignorant, and trusting invalidism. Many advertising agencies, like many individuals, believe with the Spanish proverb that "money never smells." No side of man is so exposed to fraud as where his physical ailments are concerned. To the great mass disease is still a mystery. The ordinary individual when ill calls the doctor. He hopes that he has selected the right man, he trusts that he will fare better than the biblical Asa who called a physician, but how can he know, he wants a doctor whom he can trust, who is worthy of confidence, as all should be. The healing art is the most important to human happiness of all professions. The doctor's relations with the family are more sacred than those of the priest. Every family secret, every home confidence must be his. In grasp of a doctor's ability even present civilized man is still a child. Man is the only animal who is superstitious. Our ancestors were guided in medicine and in religion by superstition. Often the priest combined the two trades and usually was as much of a quack in the one as in the other. The race has traveled a long way from these dark ages, but man has not left all his superstition behind. He has either changed his liquor or is of different mind than Calvin and Luther and their age as he is not pestered with material devils that required ink bottles and other missiles to drive away.

Upon the face of modern man there falls a more radiant ray of progress than has ever lighted a past age, but he still believes there is to be found a universal panacea that will dissolve all the ills of the body. He still hopes to find in some new vinegar bitters or peruna, a draught from the true fountain of youth; he still is willing to accept limburger cheese as a cure for cancer. The lingering trace of far-off ancestral superstitions is shown in the faith that the laying on of anointed hands and the pleading of earnest prayer can restore exhausted organs and reknit broken bodies. Hopeful

but unthinking man still believes that there will yet be found an elixir of life as potent as that which Bulwer's Margrave distilled and then wasted on the desert hill of Australia. I glory in the faith and hope of the optimistic man of the twentieth century, but I cannot bank upon his judgment when I see the mighty fortunes his credulity has built in the marts of quackery. Our schools and colleges are now releasing their myriads of graduates, school taxes are Pikes Peak high all over the land. In government, in finance, in industry, in a hundred fields of achievement our people are supreme. Every night a hundred million eyes turn to the glowing planets, stars, and worlds in the skies, and yet some men still believe that bodily health has to do with mystery and miracle and not with the law, science, and skill and knowledge.

In spite of the world's accumulated wisdom, experience and warning the fakir still wears purple and the quack drives the best make of automobile. Human credulity is a mine that is never worked out. To the schemer it is a perennial Golconda. The promoter who offers miraculous cures or 100 per cent investments never lacks customers. Franklin said "the family of fools is ancient." We can add that it is still very large as well as old. Common sense is man's most reliable capital. With it he is rich, without it he is an insolvent in the courts of fortune. Many who are sane upon most relations of life give their common sense an opiate or send it upon a vacation when they touch upon questions of health, speculation, or the invisible world. Nearly every stairway in the business part of our cities carries the names of fortune tellers, palm readers, and cure-all doctors. They promise to cure every ill from love to piles without knife, calomel, or publicity. Their guarantee is not unlike the prayers of a Mohammedan priest I saw on Mount Moriah, Jerusalem, who offered three grades of prayers, "the ordinary," "the strong," and "the sure fetch," the one used, to be determined by your donation, whether a copper, a silver, or a gold coin. The prosperity of these knights of humbug and ladies of imposture is almost an impeachment of modern intelligence. Should Euripides return he could repeat what he said 2300 years ago that "against human stupidity even the gods are helpless."

Man must love to be humbugged or he would not be an easy victim; that he is, is proof that some of us have not gotten beyond the childhood stage and need a guardian.

I do not love monopoly, either medical or any other kind. I believe in man being free, but I also believe that the strong should protect the weak, that no charlatan should be allowed to exploit the credulous; the fool is as much the care of the law as the wise. The doctor who knows is under a moral obligation to protect those who do not know.

It is as much his duty to expose and drive out the ignorant and incompetent practitioner as it is to refuse fellowship with any other assassin. The man who will operate without knowledge or skill should be classed with the burglar; his main purpose is money, but he will kill if he must. Professional dignity is no legitimate retreat from responsibility to the community. Cities should deny harbor to all kinds of imposture, morals and health are as much entitled to protection as property. Newspapers should decline all advertisements that promise the impossible. The press is improving in this respect—many papers now decline most seductive financial offers to print announcements of quacks, spirit healers, and fraudulent remedies. Grand juries might do a service by warning those who still carry thinly-veiled offers of criminal and swindling operations and speculations.

"Caveat emptor" (let the buyer beware) is doubtful honesty in a merchandise trade. In the matter of health it is a criminal doctrine.

When my rural mind thinks "physician" it is the all-round doctor that fills my view. You are all "M. D.," but you are specialists as well, versed in all branches, you are experts in one and that the most unselfish. This is an age of specialization. Men are not expected to know everything. You are not the sort of specialist Governor Shafroth has in mind these days, as he worries over State finances, trying to make an all-covering garment out of half of the tax cloth of gold he thinks he needs. There forms a mental prayer that some of Colorado's rich men would make their will and call a specialist. There is no tax more easy or welcome than an inheritance tax; to make such a tax operative there is no one so well equipped as a wide-awake patriotic specialist. That, however, is not your province. You deal not with the rich. Oppulence runs away from the mentally unfit, they have no purse to give those who care for them. Hope of princely fees, split or otherwise, do not inspire you. Humanity must have a large place

in the ideals of those who devote their lives and ability to the insane. Your mission is to ease the condition of God's most unfortunate children. Brains darkened with a blot, intellects clouded with visions and hallucinations demand the highest skill.

I can visit a prison without emotion, but an asylum grips the heart and touches the deepest sympathy. A criminal is confined on account of deliberate willful conduct, while the insane are stricken of God.

Lombroso insists that insanity and genius are of the same family. Greatness springs from abnormal brains, brains that are largely developed in one direction at the expense of other qualities. It is the unbalanced intellect that scintillates and startles. The ordinary, even-poised brain is the fountain of mediocrity; they do the plowing and planting, they hew the wood, draw the water and keep the world from starving and then pass into oblivion. Sane people with normal brains do the world's work, but their individuality leaves no mark on the historic page; mental abnormality is the flame that blazes from the intellectual beacons of human annals. The lobes of my brain are symmetrical and even, therefore normal, and I can do only the ordinary and commonplace. One lunatic in politics, religion, finance, or literature, can create more excitement, more commotion, fill more pages in a newspaper than an army of even-poised useful workers. According to the estimate of much quoted psychologists, Shakespeare, Napoleon, Watts, John Brown, all the sons of glory, were crazy. I am sure that you are sorry that I have none of the traits. There is a popular idea that those who associate with the insane in time take on their peculiarities. If this be true and also true that genius and insanity are close allied, you could by a sort of left-handed logic prove that you were all touched with genius, but it would be what Longfellow calls "the divine insanity of noble minds."

Civilization offers no trophy nobler than the advance in the treatment of the insane. In more superstitious days insanity was considered a diabolical and not a natural malady. To drive out the devils the lash, the fagot, all kinds of torture were justifiable and commended. In the ages of brutality the demented were the most unfortunate of all. The very gates of heaven must have rocked with the sobs of angels as they wept over man's inhumanity

to their unbalanced brother. In our own America, before the building of our great asylums, there were thousands of families afflicted with insane members, many of whom were confined, chained, and treated like wild beasts. Those whom God had cursed, man abused. There never was a "fall of man"—he started a brute and could not fall. From primitive animal conditions humanity has been a constant growth and evolution. From primal, groveling brutehood man has emerged, standing upright in the image of his Maker. No trait marks the divine attributes more clearly than the improved treatment of the insane. The asylums of other days were chambers of horror. The halls of Eblis, with their procession of the lost, were cheerful in comparison. To-day the asylum is a harbor of mercy. Force has given way to kindness. The stone-pillared dungeon has been abolished. Chains and straight jackets have been relegated to the junk pile, out-door freedom, work, and gentleness are elements in modern treatment. Asylums are places of study, entertainment and cure as well as of detention. Kindness is a better medicine than cruelty. Prison life in Colorado is being infused by the same spirit. Men are being trusted and through that trust are being made worthy of trust. We are coming to a higher and nobler conception of human nature, and through its workings many of the devils of mind and conscience will be driven out to return no more. The benedictions of John Howard and Wilberforce and Charles Reade's Dr. Sampson must be upon the unselfish workers who are transforming our asylums and prisons. Progress has no better credentials than these reforms. I believe in modern achievement and in modern doctors; progression is the law. If ill I would rather be treated by a 1911 graduate than by the most famous of the doctors of antiquity. Green, crude, and inexperienced, they know more of the cause of disease and the art of healing than the founders of the profession.

Aesculapius, Hippocrates, and Galen could not get a diploma to practice in Colorado, and if they did practice they would be jailed for mal practice if not manslaughter. Ideals may not have changed, but science and research have during the past generation revolutionized methods. There is still blundering, but there is also much that is exact and certain.

Oliver Wendell Holmes was joking and had no intent to arm

the skeptic when he said: "If all the medicines in the world were thrown into the sea, it would be better for the human family, and worse for the fishes." When he was sick his mouth opened as readily to the dope of other doctors as a bird in the nest opens to the worm the mother bird brings. In the face of modern medical knowledge, the very ghost of Sir Alfred Cooper must blush when it recalls his dictum that "medicine is a science founded on conjecture and improved by murder." We do not kill people by bleeding, as Washington was killed. Had the surgeons of the Civil War the knowledge and aids that are now at our command, the lives of 200,000 soldiers could have been saved. The ridicule and suspicion of the past may have been justified, but to-day it can be applied only to individuals, not to the profession. Because some careless surgeon sews up a sponge or an instrument inside of his patient abdominal operations are not to be condemned. Last week a doctor of Atlantic City was sued for $35,000 damage for having left a pair of forceps in the abdomen of a patient upon whom he had performed an abdominal operation. Her husband is a clergyman, but the fact that the forceps were silver and that the doctor did not add them to his bill did not satisfy him. This unpleasant or criminal incident does not mitigate against the wonderful abdominal work that is now being done.

Many doctors have fads and hobbies, and in their enthusiasm are apt to make symptoms bend to their fads. Appendicitis is an old disease with a new name. Flaxseed poultice and olive oil cured as many as the knife and it made no mistakes, but an ill-smelling poultice was not artistic. An old woman could apply the remedy as well as a surgeon. A few articles in medical journals made the elimination of the appendix a widespread fad. To-day a woman has an attack of colic; she lies down and calls for a fashionable doctor to come and relieve her of her appendix.

With the laymen there is a growing sentiment that fees and fashion have more to do with this operation than necessity. A close season or the limiting of each doctor to a certain number of cases as a hunter is limited in the amount of game he may kill in a season might be well. The true surgeon must dare to operate, but he should have the discretion to make the knife the ultimate and not the initial means of relief—the judgment should be stronger than the desire to cut. Blunders occur, but against every

mistake a thousand victories may be cited. Wisdom never marched with as confident tread as to-day. The research and sacrifice of unselfish, devoted, and courageous men have widened the intellectual horizon and in the increase of knowledge no branch has achieved as much as sanitation, anatomy, and the pathology of disease. It was the telescope that first placed creeds and theologies afloat upon the sea of doubt, and now it is the microscope and science that have fixed material things upon the solid table of truth. So marvelous have been the discoveries in bacteriology that we dare not say that the secret of human life itself may not some day be revealed by the investigation of God-like science. Mystery no longer halts and appals. The crucible, the microscope, and chemistry are fast limiting the boundaries of the unknown. Soon it may disappear, as the Great American desert flitted and faded and finally vanished from the geographic maps of America. Ignorance, however, still fights. Liza H. Badger, secretary of the Anti-Vivisection Society, is quoted by the New York *Sun* as saying that "Pasteur is not only a murderer but a charlatan and plagiarist and we can prove it." The *Petit Journal* of Paris invited its readers to send in lists of the twelve greatest Frenchmen. Pasteur's name, like Abou Ben Adam, headed the list. I stand with that estimate and not with Liza, I love dogs, but I love babies more. The lazy and the sloven also laugh at the germ theory; they believe in bugs they can see, but not in the bugs invisible; to believe they must clean up, and that is trouble—they feel that science is an intruder—their indolence responds to the sentiment:

> "That I was a babboon
> And you an ape,
> Did no difference make
> Until Darwin spake."

In spite of the ignorant, the lazy, and the dirty, the doctors of the world will carry on the fight against contagion. Through annihilation of the mosquito in Cuba and Panama, yellow fever has been mastered. By destroying the rats and other sanitary measures, oriental plagues have been halted on our shores and San Francisco made the healthiest city in the world. The serums of science have relieved thousands of American homes from the agonies of stricken children. The doctors are now inspiring a new health crusade, the sanitary battle cry is "swat the fly." We

love Uncle Toby for his kindness, but we do not agree when he captured an annoying fly, opened the window and said: "Go poor devil the world is wide enough for thee and me." Today the world is not wide enough for man and fly.

There is no sanctified profession. The way we do our work and not our trade ennobles. Money may be the Aladdin lamp of power, but it is service that brings true happiness. No man does more for his fellow man than the doctor. There are as many consecrated lives in the medical profession as in the ministry. It is what is done for others that marks the man. Neither wealth or beauty confers greatness. The two hundred thousand dollar jewelled crown placed upon the head of the woman at Pasadena did not make her a queen.

With passing years and experience doctors grow wiser and simpler in their treatment. Man's anatomy may be complex, but a disorder may yield quicker to a simple than to a compound remedy; a sensible diet, pure air, pure water, exercise, temperance—these are the doctor's competitors, these are the prescriptions they most often give, but seldom are they heeded. When I feel heavy and below par I try to coax my doctor to play golf with me; that puts red blood into old bodies; it is more potent than Brown Sequard "extracts" as a deterant of old age. When I get to heaven, I intend asking St. Peter for a mansion next to the golf links.

I have many friends among the doctors, but golf, a clear conscience, and a pure democracy keeps me so healthy that I feel like apologizing when I meet a doctor. Dr. Work is such a fine fellow and has such an attrative sanitarium that I am almost sorry that I am not a little crazy so I could patronize him and his institution. A good doctor is the friend of man; when he enters my home I receive him as my friend; he becomes my father confessor. If he be not as wise as I would regard him, I do not want him to confess it. I give him my full confidence, and I want him to have full confidence in himself. If you have faith in your doctor and in his remedies he can feed you bread pills and you will soon take up your bed and walk and it may be the faith rather than the medicine that cures.

Self-confidence is an important element in a doctor. Others lean upon him. Faith in self will beget faith. "He cures most in

whom most are confident " is as true to-day as when Galen uttered it. Modesty is a beautiful trait in a young girl, but in a mature man it is affectation. The doctor who does not believe in himself would better go into some other business. The pronoun "I" is the master key of success. The Savior used it with frequency and power.

I may not believe in a doctor's trust, but I believe in trusting my doctor, and I am not offended when a doctor tells me why he is worthy of trust; cheap theology my be risky, but cheap doctoring is a tragedy. A quack is a compound grafter, he steals both the money, and the health of his victim. The leaders of the profession are in a way responsible for the quack.

People do not send for a doctor they have not heard of; they patronize those whose names they see and hear. The young doctor will do well to buy his first office and home outfit on credit if he can, and of many stores, creditors remember and patronize those who owe them. A modest, cash-paying customer does not come under the eye of the proprietor and is soon forgotten.

It is neither good sense nor business sagacity for trained physicians to give the quack a monopoly of advertising. The press is a mighty vehicle of power and it is legitimate for honest people to use it. The talent of the skilled physician is as much out of place as any other talent when hid under a bushel. If legitimate professions would advertise they could rely upon the press to help them drive out the quacks. It is only fair to buyer and seller that those having ability and merchandise to sell should make it known. Publicity of the good drives evil into retirement. There is such a thing as being too reserved. Modesty in business is like doing business upon a back street. There can be a false conception of dignity. Dignity is often the mask of ignorance. In this age of electricity, automobiles, and flying machines dignity is apt to get run over. It is about the cheapest trait in human conduct. In assigning the parts of a play on the stage the poorest actor is usually given the dignified parts.

Under the windows of this hotel Bishop Warren's Trinity Church is ablaze with electric signs that would be the pride of a theater. The Lord's business is not ashamed to advertise. A paid card in a newspaper may be unethical, but when a reporter gives a column write-up of a skillful and delicate operation, the operator

does not protest, but buys six copies of the paper, five of which he sends to friends, and the other he pastes in his scrap book.

The assistant at an operation feels slighted and hurt if the case is mentioned in the papers and his name is omitted. There must be a great difference between an advertisement and a news item, but many are so stupid that they do not discern it.

In my day I note a radical change in the treatment of each other by doctors of different schools. It was not so long ago that one school would not confer with another. Each thought the other should be debarred from practice if not sent to jail. To-day the millenium dawn must be breaking; doctors are tolerant of each other and a moderate amount of harmony and friendship prevails. Bigotry and prejudice are fading. Preachers change pulpits. In Denver I have seen rabbi and priest, Methodist, Unitarian, Presbyterian, Episcopal, and Congregational preachers in the same pulpit and participating in the same religious service. Religion may be growing, but the walls of creed are melting and crumbling.

I do not study closely the systems from which my medical friends draw their diplomas; all schools have their virtues and their peculiarities. I try to have no personal prejudice and to see the good in all. I was raised on mercury; blue mass was as common a remedy in my boyhood community as quinine is in a malaria-infested zone in the south. The influence of early training lives long, but I can conceive of conditions that might make me a patron of different schools. For instance, last winter, when I marked time for four months in an alleged contest for the Senate, it was the soothing and forgiving treatment of the Christian Scientists that I needed. Prayer only can cure the perfidy and disappointments of politics. When afflicted with a moderate novel-reading, scold-the-family, kick-the-cat degree of invalidism the homeopathic philosophy and pills of power seem to meet the demand, but when there is a genuine Madero riot and insurrection in my interior department, I 'phone for the old-style calomel doctor and I want him quick. Can you guess the alma mater of Dr. Black, of Cleveland, who last winter testified that in a professional way he had kissed a thousand women, mostly old. To cheer was a part of his treatment; many patients need a hand pressure for a lullaby more than a physic.

The more I study the work of those who are devoted to the healing art the more certain am I that they have achieved more that is noble and beneficent than any other branch of the human family. In the estimate of the statesman, who has to do with war, government, and finance, the banker comes first. In the scales of humanity and of service, the physician outweighs the man of gold. The banker has a heart, but it is often atrophied. Like the vermiform appendix it has forgotten its original function. The banker may be respectable; he may even be generous, but the custodian of other people's funds must ever be on his guard. There is a world-wide conspiracy of those who have no money to take it away from those who do have it. It takes an alert, a selfish, almost a hard man to be a safe banker. There may be liberal, sympathetic, all-around good fellows who are bankers. When you find that kind dine with them, drink with them, travel with them, play with them, but put your money in some other bank.

In the final estimate of human character it will not be financial cunning that counts the most. Those who discover a new remedy or develope a new grass or a new food do more than he who finds a new star or the magnate who gathers a billion in gold. Medicine and surgery have been progressive. The discovery of anesthetics, of bateriology, of antiseptics, of a hundred different remedies and methods of cure have placed the world under great debt to the medical fraternity. The banker creates nothing, invents nothing. There is nothing new in banking. Venice had a better banking system than we have. Lorenzo was an expert in the art of usury as is our own Morgan, and he practised it as magnificently. A constantly improving medical efficiency will make a revision of the Carlile mortality tables necessary. The average span of life has been lengthened. Some Malthusian philosopher may claim that the saving power of the skilled physician will deteriorate the race. They perpetuate the unfit. Civilization demands quality, humanity pleads for all. Civilization is not concerned with the weak; its creed is "the survival of the fittest." Doctors are the apostles of humanity, the more helpless the greater their efforts to save. With the increasing ability to prolong life, to master plague and epidemics and contagion, and the coming of universal peace, there will soon result a congested world. Some day a crowding race will develop the science of eugenics,

when the unfit and degenerate will be forbidden to multiply and the same care will be given to the breeding of men that is now given to the breeding of cattle, pigs, sheep, and horses. With that day will come a new race of Spartan manhood. In the last Colorado legislature a woman member proposed a law that would stop the perpetuation of the unfit; the male members voted the bill down, whether from motives of humanity or for personal reasons we do not know.

Medicine still has its freaks, its false prophets, and its errors, but every year there emerges certainties from the cloud of doubt to take their place with proven truth. There is a growing tendency to let nature take its course, to stand by the laws of God until better ones can be discovered.

And now, my doctor friends, I want you to forget this infliction by going up into our great hills. They are inspiring and they are silent—they make no speeches and read no papers. No convention is ever more welcome in Colorado than a convention of doctors. Upon our mountain tops you need no disinfectants; the water is as pure as that which flowed in the four rivers of Eden, and the air is the air the angels breathe. While here we hope you will be as free of care as Eve was of laundry bills.

Colorado is not heaven, but it is as near to it as you can get on this continent. We are modest and do not press our claims and will admit that heaven does surpass us in two things—it has better roads and more angels than Colorado.

LIBRARIES FOR THE PATIENTS IN HOSPITALS FOR THE INSANE.

By EDITH KATHLEEN JONES,

Librarian at McLean Hospital, Waverley, Mass.

Some sort of medical library in the modern hospital for the insane is an understood thing and must be carried on along fairly conventional lines, but the organized central library for the use of the patients is a comparatively new idea and presents several problems peculiar to itself.

In order to find out how the various hospitals are meeting these problems and how far the organized library is superseding the old plan of bookcases on the wards, a circular letter was sent from McLean Hospital to 120 of the largest and most representative institutions of the kind in this country and in Canada. Answers were received from 95; adding for statistical purposes McLean itself, we have a basis of 96 hospitals and asylums from which to draw our conclusions. Of these 96, there are only 15 which have no books at all. The superintendents of several of these latter hospitals deplore the fact, most of them giving the illiteracy or the destructiveness of their patients as the cause; one speaks of lending his own books; two frankly state that they do not believe in libraries in such institutions. Twenty-one more hospitals have no central library, but report books on the various wards ranging in numbers from 50 to 5000 volumes. Several of these superintendents write that they would prefer a central library and hope to have it in the near future, but one states that he thinks the books do more good on the wards where the patients can have access to them at all times, and two have abandoned the central library for the old ward bookcases. Many of these ward-libraries seem to be somewhat in the nature of "traveling libraries," thus obviating in a measure the chief objection to them—their sameness. Two hospitals in one city speak of Carnegie libraries so near that they depend altogether upon them and are not obliged to have books of their own as they otherwise might.

The remaining 60 institutions report central libraries, 39 of them classified and catalogued, and others undergoing the process now or hoping to before long. Fifteen of them have librarians, of whom at least 6 seem to combine other duties. Of these 60 central libraries, 9 are maintained by regular annual appropriations of from $50 to $500, one is a memorial library, 6 are supported from the income of funds invested for the purpose, and the rest are provided for from maintenance or amusement funds. Only 7 of these hospitals date their libraries prior to 1880; the rest have all been organized within the last thirty years. McLean Hospital library leads in seniority, having seventy-five years behind her, and as would be natural with such maturity, has the largest number of volumes—6700. The library of the State Homeopathic Hospital at Middletown, New York, founded in 1878, is a close second, reporting 6600 volumes, with a circulation last year of 13,336 to McLean's 8,639. It is only fair to state, however, that the New York hospital has nearly ten times as many patients as the one in Massachusetts.

It is interesting to note that in Minnesota the libraries of the State hospitals are under the care of the State Library Commission, while in Iowa the "Board of Control" has sent out travelling librarians for the purposes of organization and supervision. These plans seem so very good that one wonders they have not been adopted in other states; perhaps they have, but these are the only ones mentioned.

Of these 60 hospitals supporting central libraries, not more than one or two seem to have been able to achieve what is in many ways the ideal—the separate building devoted exclusively to stacks and reading rooms, open every day to the patients and employees—in fact a public library for private uses. The rest of them are housed in the administration building or in special rooms set apart for the purpose in some ward—and these are the ones which have to solve their own problems of administration and adapt themselves to existing conditions.

Coming from a public or a college library into one belonging to a hospital, one is immediately struck with the wholly different atmosphere. In the first place, the collection of books is formed, not for instruction but for entertainment; it is a therapeutic, not an educational factor. It is an outgrowth of the old ward bookcases and may be compared to the private library of a gentleman of

means and culture, leaning largely in his tastes to fiction, literature, travels and fine arts. Again, while in a public or a college library quietness is insisted on and conversation prohibited, in a hospital it is the aim to make of the library a pleasant recreation room and of the librarian a hostess as well as an official. It is a little difficult to combine the two qualities when one is charging from fifty to eighty books an hour, nevertheless it does depend very largely upon the personality of the librarian and the atmosphere she is able to create whether the patients will come to the library to any great extent.

These, then, are the conditions under which the hospital library must be developed: the desirable features of the home-like private library must be preserved, and all machinery of administration must combine efficiency with unobtrusiveness. Open shelves are a necessity, as the patient must be allowed to browse at will. Rules should be few and elastic, and cataloguing, classification and charging system simple and easily understood. For this last, after experimenting with several different kinds of charging systems at McLean and finding them too cumbersome for our needs or entailing more labor on the part of the librarian than seemed commensurate with results, we have reduced our impedimenta to four things—a pocket pasted in the back of the book for the date, a book card in it on which to write the borrower's name, a date stamp and a charging box—and we find them amply sufficient. The card (which it is unnecessary to stamp) will show at a glance who has had the book and the librarian will thus avoid sending the same book twice to the same person, while she can be sure that a new book has been on all the wards before the employees are allowed to have it. Getting the books back again, not only from the patients but also from the employees, is often a work of time and patience, for there are no fines (though in some hospitals failure to return a book promptly entails loss of privilege), and the borrower is frequently disposed to consider the borrowed book as his own property, thus carrying out still further the idea of the private library.

In regard to classification, the Dewey is probably the simplest for the purpose, but if necessary, tamper with him and bend him to your needs. With the first change one feels much as when, a small child, he first omitted to say his prayers; but as in that case,

though much to his surprise, nothing happened, so in this the library does go on, and the only appreciable difference is an increased facility for placing one's books where one wants them. I might mention in my own library the grouping under 796-799 of all out-door essays, "nature studies," animal stories, mountain-climbing and the like, which were scattered broadcast through 810, 820 and 500; the changing of 750-759 into schools of painting with history numbers (751 American, 752 English, 753 German, etc.), and above all a complete rearrangement of 900-913 and 920 by which archaeology is 900-909, geography 910-912, travels 913-919, and history 920 on—making a much more consecutive order on the shelves and one more comprehensible to the uninitiated.

Upon one point nearly all the hospitals quoted above seem agreed: that the central library should not entirely supersede the old idea of books on the wards, and that especially there should always be some books and magazines on the wards for excited patients, even though they are soon destroyed. The plan used at McLean Hospital seems essentially the one generally in vogue elsewhere. The wards are made a sort of clearing-house for duplicates, old sets replaced by better editions, volumes too far gone for binding, old bound magazines, and books so out of date that no one cares to draw them from the library but which help to pass away the time on the wards or in the recreation rooms. In this way the central library is relieved from over-crowding and the ward bookcases furnish plenty of books which the patients may always have at hand. As for magazines, the weeklies may be circulated among the wards, ending with those for the excited patients. The monthly magazines may be sent out in the same way, but returned to the library before reaching these wards; one copy of each of the "big four," as some one has called them, may then be kept for binding, and the others distributed among the more destructive patients.

No library, however wisely selected and carefully organized, can run itself. Without intelligent management it will soon relapse into a mere collection of books, absolutely valueless for all purposes of helpfulness. The old idea that anyone who can read and write is eligible for the position of librarian is happily obsolete in the public library, and apparently is fast becoming so in the hospitals, which are beginning to recognize the fact that on the person-

ality and ability of the librarian depends, to a great degree the success of this department. It is an interesting fact that of the two hospitals which have abandoned the central library idea neither had or has a librarian. In truth, the librarian in a hospital should have not only all the qualifications needed in an ordinary library, but she should unite in even greater degree the wisdom of the serpent with the harmlessness of the traditional dove. She ought to possess a considerable amount of tact, for she will come into more intimate and personal relations with her readers than does the average public librarian, and she must never forget that her first duty is to make her department helpful to the patients. The latter must be made to feel perfectly at home and must be allowed to misplace books if they please and take out as many (within reason) as they desire. Nevertheless they must be gently disengaged from more than one new book of fiction at a time, and if they are careless or destructive their attention must be diverted from the more costly art books to the cheaper picture books. On the other hand friendly overtures must be made to the timid and self-deprecatory, and the part of "Discourager of Hesitancy" enacted toward the vacillating and inadequate. Moreover, the librarian must have a good memory for books and be able to estimate a patient's taste, for many of them will depend entirely upon her to select their reading. They all want "good, clean, absorbing stories"; nevertheless one likes them in detective form, another in short stories; one will read only English novels, another leans to wild west cow-boy fiction while still another wishes only love stories; the librarian is expected to remember which sort to give which persons. Then, too, a physician will desire that a certain type of book be sent to a certain patient, and the librarian must know where to find it.

Above all things, the hospital librarian should be capable of selecting her own books. She should be a good critic and be personally sure that the fiction she buys is wholesome and "good literature." To her should be intrusted the expenditure of the appropriation, and she should be able to spend it wisely, keeping within its limits yet making it come out even—for the few dollars saved one year "can never come back again" to offset the few dollars overdrawn another. She must always keep in mind that the users of her library are in the hospital for recuperative, not educational,

purposes, and that seventy-five per cent of the books called for will be fiction; therefore she will not yield to the temptation to build up her department with books so solid no one will look at them—neither will she allow her garden of books to run entirely to flower. The few more solid things she cannot resist buying for the honor of her library she can judiciously send to the wards as "traveling libraries" in the hope that someone may be attracted by a book under his hand that he never would trouble to draw for himself. These "traveling libraries," composed of some half-dozen volumes on different subjects and loaned successively to the sitting-rooms on each ward for the less excited patients, form one of the best ways of reaching those patients who will not come to the library and lack the initiative to take any steps toward entertaining themselves. Such a system has been in practice with great success at McLean for two or three years, and other hospitals speak of it as in vogue in their various departments.

The librarian in a hospital certainly has a wide field of usefulness. Not only has she the patients' library under her charge, but in most of the larger hospitals carried on according to modern ideas, she will also have a medical department to look after, with its ordering, cataloguing, binding, etc., and its foreign periodicals demanding at least a working knowledge of French and German. McLean Hospital has five thousand volumes in this department, and takes eighty-four medical and scientific periodicals. Furthermore, she will probably be expected to file hospital reports, type and file name and diagnosis cards for the case-records, and if she writes a good "library hand," do any printing and labeling which may be needed. In the smaller hospitals she usually will be required to combine the duties of librarian with those of stenographer or clerk. She does many things outside of ordinary library work, and I can think of but one department where less is required of her than of her public library sister—she is not held responsible for forming the reading morals of the public school child! Yet if, sometimes, she feels that, like the immortal hero of the "Nancy Bell," she is

> "a cook and a captain bold,
> And the mate of the Nancy brig,
> And a bo'sun tight, and a midshipmite,
> And the crew of the captain's gig"—

it is, after all, most interesting work and not in the least monotonous, and it has its compensations.

In the very pleasant and suggestive personal letters which accompanied many of the cordial responses to our circular, the superintendents of these various hospitals speak particularly of the great benefit of their libraries as a therapeutic agent, and of the importance of having trained librarians in connection with them, in order not only that the work may be more systematically carried on, but because of their more intelligent co-operation with the physicians in the selection of books best suited to the mental condition of the patients. Although but one cog in the vast machinery of the modern hospital, yet the library seems generally to be considered rather an important cog and one whose value cannot be estimated in dollars and cents or in the number of its volumes.

THE EFFECT OF OCCUPATION UPON THE INDIVIDUAL.

By GRACE E. FIELDS,

Instructor in Handiwork, Sheppard and Enoch Pratt Hospital, Towson, Md.

Occupation is an essential in the welfare of mankind and is acknowledged so, in an unconscious manner, by many who, in a perfunctory way, apply themselves to some bit of work "to pass away the time." The results of aimless occupation and lack of carefully trained and systematic effort, with a definite purpose at stake, which demands self-control and concentration, are easily recognized in the unhappy faces and restless and undependable creatures met with from time to time.

Since our welfare depends largely upon the proper use of our time and the determined purpose to obtain enjoyment and benefit therefrom, aside from a monetary standpoint, every effort should be made to aid in bringing about a condition in those nervously or mentally afflicted, whereby they may receive benefits which they are unable to obtain themselves, because of lack of ability to put forth proper exertion.

The force or stimulus necessary to bring about this must be from without the individual and the continued repetition of every effort requires the most untiring and patient attention for a long time, with many resulting discouragements.

The effort should not only be to teach the patient (in a mechanical way necessary at first) to go through a certain routine of motions whereby a piece of work may be produced, but by means of this occupation the best in him should be reached and he should have gradually proven to him that he is capable and still retains the ability, although dormant, to exert and direct himself, to a certain degree, physically and mentally.

Occupation used for the purpose of benefiting a patient should gradually and unsuspectingly arouse his interest along lines away from himself. This is essential, and it is equally necessary that

such occupations should be of a character to attract, if not voluntarily, by repeated direction, the attention of the patient.

No occupation should be of too laborious a character, but a degree of physical exertion is wonderfully helpful and the manipulation of a loom affords. ample opportunity to enforce exercise for the body and the variety possible in color and pattern attracts the eye. Other practical and beneficial occupations, if room and equipment allow their development, are printing, bookbinding, metal work, leather tooling, pottery, basketry, knitting, etc.

No one can contradict the advantages and benefits possible when patients are aroused, diverted and interested, but the difficult problem often is "how," and a set of rules or theories may be learned by heart but prove of no help when face to face with the patient. Tact, common sense and patience assist most.

I have been asked to tell just how results have been secured in certain individuals, and in this manner a better idea of gradual benefit derived may be obtained.

A young woman, a teacher, was brought by a nurse to the door of the work-room and I was asked to come speak to her there, since she showed resistance and refused to enter. After talking to her a little while, she was finally persuaded to come in and was given a chair near the table where others were working. She seemed afraid, so pains were taken to be near her as much as possible and talk to her a little about what was being done by those busy there. The next day her chair was drawn up to the table so that she could see better what each was doing. Later, when asked if she would not like to try something, the answer was that she did not know how; but she was told I was there to show her how and that I was sure she could do as I told her. When the attempt was at last made it was indeed a mechanical one.

A small piece of leather with traced lines on it was placed in front of her and two small tools and a hammer selected. One of the tools was placed in her left hand and the hammer in the right. The left hand and tool were put in position and the patient told to hit the top of the tool with the hammer. This was continued until the second tool was needed, when direction was given to drop the first one and the second was put in its

place and the hammer used again. Her attention was drawn to the little pattern thus made. After a couple of days it was noticed that she looked from her work to that of her neighbor's to see if the patterns were anything alike.

Next she was asked to use ruler and draw some straight lines in a rectangle, so that some of the little patterns made with her tools could be placed upon them, at regular intervals, for decoration. There was considerable objection to this, saying she could not design, but she was reminded of the fact that she had done a little drawing at school and also that patterns made with tools were ready to be used. At last the effort was made and plenty of encouragement was given as pencil and ruler were picked up and the work started. The result was a rather poor one, a drawing teacher would say, with lines in various directions, but by the next day a clean drawing on new paper was made by me, using only a few of her lines that crossed each other at one end of the paper and that end duplicated at the other side, with dots to show where the tool patterns could be put on. Then with her paper of the day before and the new one beside it, she was shown just where her drawing and impressions on leather scrap had made the decoration for the check blotter top to be tooled on leather.

From this on her confidence gradually became stronger and suggestions made for her work were received with less and less apprehension and there was decidedly more voluntary effort. She was one of several taken to see an exhibition of craft work, and, just before leaving the hall, she secured a scrap of paper and a pencil and made a little note of some bit of decoration on a book cover, because she liked it and wished to make something similar for her next piece.

Another to be interested and helped was treated in an entirely different way and some of her delusions overcome, for a time at least. She presented a rather difficult problem and, instead of adopting totally different occupation, it was decided to endeavor to develop what she voluntarily did. Exactly how she managed to grasp pencil, with fist tightly clenched, and drew heads by the dozen, each with the same style of outline, could not be figured out. Another disadvantage was her persistency in standing up.

Securing some reproductions of good pencil drawings from a

magazine, they were shown her and a few remarks made about them. Then a pencil and paper were placed at her disposal and one of the drawings put in front of her to copy and a chair pushed directly back of her. As was expected, no attention was paid to the drawing after her pencil touched the paper, but she was allowed to proceed and in a few minutes her drawing was done. I then asked her to move a little and, sitting upon the chair, pointed out two or three prominent points in the copy drawing and, after speaking of each, endeavored to find the corresponding one on her paper. She informed me she "made hers up." Then I told her again how I wanted her to try and another attempt was made that morning. This time she was reminded several times, from wherever I was in the room, to watch the drawing, and was told to sit down while working.

This was repeated each morning, and when a criticism of her work was given it was always from a sitting position. Her attention was drawn to the free and easy lines of the copy and it was suggested that if pencil was held looser, her lines would become more like the others. It was not very long before she really began trying to reproduce the drawing before her, comparing the one on her paper with the other and forgetting herself enough to drop down upon the chair occasionally. She would also ask what I would have for her to draw the next day. A study of a flower was used and this held her attention well, but the greatest satisfaction came when the spring opened and the real flowers could be placed before her. When told that a leaf was too near the blossom or too high up on the drawing, and shown how to tell the proper place by holding her pencil vertically or horizontally and noticing where a straight line would pass through each, she would endeavor to do this and made no objection to occupying the chair placed for her.

A highly excited and wilful case was determined to have a hand in everything being done in the rooms. She was naturally of an artistic nature and capable of some designing. Several suggestions brought with her, on entering the class, were not suitable for the work she wished to do (tooled leather), but parts of the ideas could very well be adapted and the changes were suggested, with reasons why they were thought necessary. These were accepted graciously and the patient was kept busy for a

while at drawing, then the work progressed. After a few days it was suggested that she take advantage of the opportunity and make a few presents for friends. This was a good scheme and immediately a list was made out of those she desired to remember and, to my delight, it was a long one. Then the little leather article suitable for each was decided, the design for each was made and one article completed before the next was started.

When expressing a desire to do weaving, metal work, etc., she was reminded that the present for this one or that one had not been made yet and generally she would take up her regular work, with the remark that she certainly must not neglect that one.

One day, however, while working on a card-case for one she was very fond of, my inability to leave another patient and go to her at once, threw her into quite a rage and, throwing her tools upon the table, she left the room and the building. I could watch her from where I stood and saw her speed gradually decrease, then she stopped entirely, turned about, then reversed again but turned the second time, looked at the clock and walked back. When she entered the room again, I was busy near her place and, as she sat down, she remarked apologetically that some one had said she ought not allow herself to be so horrid and ugly and she guessed he was right, and she certainly wanted to finish that card-case that morning. She was not able to control herself entirely, for in her excitement after returning, she made a miscalculation in spacing, which distressed her greatly, but I was able to use this mistake as an additional feature, which pleased her and rather added to her original idea.

Another patient, a man, was dull, stupid, morose, sat about with his head on his hands, noticing nothing that was around him. When first started at metal work, he could only be induced to work for ten minutes at a time, but before long he accepted the suggestion that he rest twenty minutes or a half hour, then try ten minutes more, and in this manner he was gradually induced to lengthen his working periods. When one article was about finished, he would inquire what was ready for him to do next. He had become interested.

Effort was made, from time to time, to get him to suggest something to make, copy something he had seen or make some-

thing for himself, but his reply usually was he did not know. After several months, however, more effort was made along this line and several times, when a piece was completed say twenty minutes or a half hour before he would stop working for the day, the next thing planned for him was withheld and he was again told to spend that time thinking up something. By this time he frequently worked two hours or more without stopping. He had become more cheerful and when not furnished with work he would accuse me of making him "lose time." Once he greatly encouraged me by telling me "I will do the work, but you must do the thinking, that is what you are here for."

However, after much more waiting and hoping he would make some effort, the first thing he planned was a belt buckle without rivets or soldering. Then a plan for attaching the chains to a copper hanging receptacle for flowers, he made out of bits of torn paper caught together with black cotton. He had always been fond of horses and his last effort was to make himself a pair of brass spurs, and he brought a much rubbed-out rough drawing of the shape he wanted, asking me to "fix it up."

The case of another proved quite gratifying. When brought to me it was necessary to place her upon a chair low enough to permit me leaning over her from the back and, having my right and left hand upon hers respectively, slowly and carefully direct her, frequently holding the needle in place, for she seemed to have lost all ability to do so. But she gradually improved and took more interest in her work. Before leaving she mentioned that her little brothers and sisters at home would want to learn how to make baskets too, and twice since leaving the hospital she has had me purchase materials in the city and send them to her.

In some cases where extreme lack of control has been indulged in to excess, positiveness is necessary, but it should be amply coated with gentleness and can frequently accomplish much. Upon two occasions a patient had indulged in profuse weeping and the weaving of a rag rug for her mother's birthday was stopped for a little. The date was not far distant, and the next time there was an outbreak I took my place at her side and, lifting her head and taking away the handkerchief, I put the shuttle in her hand and told her to keep on with her work. She declared

she could not, but I was positive and insisted upon her keeping on with tears streaming down her face. Occasional tears were shed, of course, but no more violent attacks were allowed, because the weaving would not be done in time for the birthday. The rug was completed for the occasion and some self-control gained in the bargain.

In concluding, it is easily seen that, with careful and individual attention, lack of confidence may be overcome, attention concentrated, muscular rigidity relaxed, comparative faculty and willpower strengthened, self-control and perseverance in effort aided, submission to guidance fostered, physical development stimulated and an interest aroused in the individual that stretches out beyond himself and proves a factor in producing a more normal condition.

Medico-Legal Notes.

DECISION AND OPINION ON A WRIT OF HABEAS CORPUS.

The People of the State of New York *ex rel* WILLIAM J. LEE, *Against* ROBERT B. LAMB, Superintendent of the Matteawan State Hospital	State of New York, Duchess County Court.

HASBROUCK, J.

Hearing upon the traverse of the return to a writ of habeas corpus issued on the relation of William J. Lee on the 23d day of January, 1908.

The Relator had been committed to the custody of the superintendent of the Matteawan State Hospital by the order of a Court of General Sessions of the peace of the city and county of New York, on the 1st day of July, 1907, "there to be safely kept and detained in said hospital until he be restored to a sound state of mind and understanding."

The Relator had been indicted for the crime of violation of Sec. 559 of Penal Code, for sending a threatening letter to Governor Stokes of New Jersey in which he threatened to kill him.

Before his trial a commission was appointed by the Court to inquire whether the Relator was of sound mind and understanding or not, for the purpose of ascertaining whether he was in a situation to be put upon his trial for the crime charged.

The commissioners, Warren Leslie, Esq., Anson J. Moore, Esq., and Samuel W. Schapira, M. D., were appointed by Judge O'Sullivan at a Court of General Sessions on the 25th day of April, 1907, and took their oath of office on the 30th day of April, 1907.

Their first meeting was on May 3d, 1907, and their last on July 1, 1907, and between and including said dates there were twenty-nine meetings of said commission, and a most exhaustive examination was made and a voluminous volume of testimony taken.

This volume of testimony is all before me, not of course as original evidence or as evidence at all of any of the facts therein testified to, but on the hearing before me it was offered in evidence on the part of the Relator as the foundation and basis of the opinion of the Relator's expert medical witness, Dr. Heinrich Stern, that the Relator was sane.

The Assistant District Attorney representing the defendant also used this record of the commission in the cross examination of said Dr. Stern, so the whole book is before me as a test of the value of his evidence and of the soundness of his opinion.

Of course by the traverse of the return, the question raised before me was the present sanity or insanity of the Relator, but when Relator's sole expert witness testified that his present judgment and opinion was the same as that of his judgment and opinion formed and testified to on the hearing before the commission, and that it was arrived at mainly on the same state of facts—all the testimony given before said commission, and that the only additional information he had was a short examination, physical and mental, of the Relator a day or two before his testimony was given, it became necessary for me to examine this record to arrive at a just conclusion of the soundness of Dr. Stern's opinion.

The pertinent facts of the history of the case of the Relator as shown by the records upon which the witness Dr. Stern based his opinion of sanity are as follows:

In 1902, he was about forty years old; he had a good common school education and for twenty years or more had held a good position in an iron works, where he was employed as estimator, which position he lost by reason of the sale and absorption of the iron works in the steel trust. He had a wife and three children, a comfortable home in Trenton, N. J., worth about $4000 and mortgaged for $2500, and certain other real estate holdings and property, the accumulation of his lifetime amounting to several thousand dollars.

When thrown upon his own resources through the loss of his position in the New Jersey Steel and Iron Company in 1900, he went to Roanoke, Va., to work. He was there taken sick, returned to Trenton where he had typhoid fever, a serious illness which incapacitated him for quite a while.

In the early part of 1902 he started in to work on his own account. First he began the construction of a house. He bid for the contract of a public school house and not being awarded the bid, as he states, made a scandal about it, and subsequently broke the windows in the house of the architect who drew the plans and of the architect's brother who was a director of the Trenton Trust and Safe Deposit Company.

On May 29, 1902, he agreed with the real estate agent who had the same for sale to buy the Phœnix Iron Works at Trenton and paid $500 on account for which a receipt was given by the real estate agent, and in which was incorporated the terms of the sale, namely: that the balance of the purchase price of $12,000 should be paid, $1500 in cash when the deed was delivered with a mortgage for the remaining $10,000.

He was allowed to and did take possession of the iron works and began to get them in shape for operation.

About this time he attempted to bid upon some repairs to the heating apparatus of the State House and says he was not allowed to do so, but that the contract was given to one Throop, a member of the Mercer County political ring, according to Relator, and afterward elected sheriff.

There was considerable delay about the drawing of the deed and of the mortgage, which would complete the sale and transfer of the title of the Phœnix Iron Works according to the agreement made between the real estate agent and the Relator.

Garret D. W. Vroom, a prominent lawyer of Trenton, N. J., and now judge of the Court of Appeals, was the attorney for the owner, an invalid lady, and he turned the matter over to another attorney in an adjoining office by name of Scott Scammel. He prepared a deed and mortgage which were not satisfactory to the attorney for the Relator.

The required corrections were made, the new papers were submitted to Relator's attorney, and approved, and Mr. Scammel procured their execution by the owner of the property on July

17, 1902, and notified the attorney for the Relator that the papers were ready for delivery upon his completion of the payments as agreed, on the next day.

The payments were not made, and on August 11, the Relator was arrested and in a day or so committed to the New Jersey Insane Asylum and the transaction was never completed.

The Relator claims that he was at all times ready to complete his purchase by the payments of the amount due, but the facts in the case do not indicate it and if he was, no explanation is given, why between July 18 and August 11 he did not do so.

About this time Relator had some trouble with the Trenton Trust and Safe Deposit Company over his bank account and certain checks drawn by him were protested, and among them were two checks given for freight charges to the Pennsylvania Railroad Co. As the result of this the Pennsylvania Railroad Co. withdrew from him the weekly credit privilege which he had formerly had and required him to pay all freight charges on the delivery of the freight.

Frank A. Briggs, now United States Senator from the State of New Jersey and at that time State treasurer, and according to the Relator, county boss of Mercer County, was one of the commission with the governor and comptroller who controlled the letting of the contract for the steam heating in the State House.

The Relator says that he suspected that Briggs was the man who had caused the Pennsylvania Railroad Company to take away from him his weekly credit.

Meeting Mr. Briggs on the street in Trenton, the Relator stopped him and publicly insulted him.

About the same time he smashed the window of the Trust and Safe Deposit Company with a brick, the reason being given by him was that he wanted to show up the methods of the company and the men in it whom he suspected of being in a combination to ruin his credit and put him out of business.

Barker Gummere was treasurer of the Trust Company and also county clerk, and was, as the Relator states it, one of the Mercer County gang.

On or about the 3d of July, the Relator had been arrested and fined for shooting off a revolver on or about his premises, con-

trary to the ordinance of the city, and he had been arrested and given bail on a charge of breaking the windows of a Professor Mumford, a neighbor of his.

After the weekly credit had been withdrawn by the railroad company, the Relator wrote to the treasurer of the company a letter in which he said:

"I have reason to believe that State Treasurer Briggs is responsible for my removal from your weekly accommodation list. This is to tell you that if Briggs succeeds in ruining me I will deliberately with malice a-fore-thought and in cold blood murder the cowardly cur. You may use this letter as you see fit."

The reason given by the Relator for writing this letter was that he "suspected that there was an organized attempt to ruin (his) credit; that the people who were engaged in this organized attempt were members of what is known as the Mercer County ring and (he) thought that State Treasurer Briggs was the boss of Mercer County."

He gives no other reason for suspecting Senator Briggs, than that he was an influential man in the county; and it does not seem to have occurred to him that two protested checks given in payment of freight bills would furnish a simple reason for the withdrawal of further credit.

The irrational and violent actions of the Relator seem to have attracted attention of the authorities at Trenton, and he was arrested on August 11, 1902. He was examined by two physicians who certified to his insanity, and through the influence of the attorney who had represented him in the negotiations concerning the completion of the purchase of the Phœnix Iron Works, his wife became the petitioner for his commitment to the asylum, instead of the public authorities, she being told, according to the Relator, that if she did so she would be able to get him out after a few weeks.

Garret D. W. Vroom was the president of the board of managers of the New Jersey Asylum to which the Relator was committed, and Scott Scammel was secretary of the board.

This fact of the connection of the attorney of the owner of the Phœnix Iron Works, who represented her in their sale, with the institution in which he was incarcerated, seems to have made a deep impression on the mind of the Relator, and to have

aroused the suspicion that Judge Vroom was in a combination with the " Mercer County gang " to ruin him.

However, the Relator states that Judge Vroom was not a politician and did not belong to the gang, but that having got into the conspiracy innocently, he could not consistently get out of it, and had to stand by his friends and join them in their persecution of the Relator.

The history of Relator's detention in the New Jersey Asylum is that of a more or less violent and excited patient.

He escaped from the institution on November 10, 1902, and amused himself by sending many taunting or scurrilous postal cards to its superintendent, Dr. Ward.

He went to New York, had himself examined by a physician who gave him a certificate of his sanity; he telegraphed to his wife that he had this certificate of his sanity, and that he was coming back to Trenton with it.

On his arrival at Trenton on November 21, 1902, after giving this notice, he was arrested at the station and returned at once to the asylum. He seems to have been surprised that this should have happened.

After his first arrest and incarceration in the asylum, negotiations were taken up between the attorneys for the owners of the Phœnix Iron Works and attorneys representing the Relator, the last one being Chancellor Bird of New Jersey, toward the solution of the tangle of the uncompleted purchase of the works.

After a peremptory notice given by Judge Vroom, representing the owner, that the property of the Relator should be forthwith removed from the premises, the Phœnix Iron Works were sold to Throop & Sons for the same price agreed to be paid by the Relator. The $500 paid on account to the real estate agent by the Relator was returned to his wife and a sum, either $700 or $500—both amounts appeared in the testimony—being the appraised value of the property and improvements added to the works by the Relator, was paid by the new purchasers to Mrs. Lee. The Throop who got the contract for the State House heating plant was a member of Throop & Sons.

Lee claims that he had expended in improvements and repairs the sum of $9000, but on his examination as to where he got the money to do this he fails to give a very satisfactory account.

The arrangement of the uncompleted purchase of the Iron Works, completion of which at the time by the Relator by reason of his commitment to the insane asylum must have seemed impossible to all concerned, seems not only most reasonable but rather liberal, and the only complaint that the Relator could justly make under any condition would be that enough was not allowed for the improvements put upon the works during his few weeks' occupancy.

Vice-Chancellor Bird, who represented his interest in the arrangement, subsequently appeared for the Relator in habeas corpus proceedings begun on December 9, 1902, before Vice-Chancellor Reed by Relator's wife for his release from the asylum.

The chancellor reserved his decision and in the interim Relator's father died, and Lee was allowed to attend his funeral in the custody of his wife on December 10, 1902.

He did not return to the hospital after the funeral, but in March, 1903, he returned to his home in Trenton, where after staying a day or two he was arrested by the authorities and again committed to the hospital on March 14, 1903.

On April 28, 1903, a final argument was heard in the habeas corpus proceedings before Vice-Chancellor Reed, who rendered a decision on May 22, 1903, that he was forced to the conclusion that the petitioner was not yet cured of his mental disorder.

Three days after, on May 25, 1903, the Relator again escaped from the New Jersey institution.

The records show that he always held very bitter feelings against Dr. Ward, superintendent of the hospital, and the physician under Dr. Ward, who had charge of him. He went so far on one occasion as to spit in the face of this physician, Dr. Cort.

This was the end of the Relator's experience in the New Jersey institution.

He came to New York and after a time got employment there at his business of estimator in certain iron works.

He gave to one of the New York daily papers an account of his experiences with the New Jersey authorities and in the New Jersey asylum, and this appears to have been published as quite a sensational article.

As the Relator himself testified in subsequent proceedings before Referee Nealis, his opinion then was that it was the

authorities of the New Jersey State Hospital at Trenton that were working against him; that the responsibility had been shifted to them. In other words, the original conspiracy of the Mercer County gang to ruin him and put him out of business had now become a conspiracy of the New Jersey State Hospital authorities, and that they were in a league against him.

During this period he wrote various letters to different people and newspapers of a more or less threatening, scurrilous and abusive character.

On or about November 29, 1904, he wrote a letter which was printed in the Trenton *True American*, in which he expressed his belief that Vice-Chancellor Reed had violated his solemn oath of office in order to aid his friend Vroom when he made his decision on the habeas corpus proceedings remanding the Relator to the New Jersey State Hospital.

He stated that his object in writing these letters was to force the authorities of the New Jersey State Hospital for the Insane at Trenton to cause his arrest in New York, where he thought he could get a fair trial and prove his sanity.

When he was examined before Vice-Chancellor Reed he had acknowledged his mistake in writing the threatening letter against State Treasurer Briggs and had stated that he would under no circumstances whatever again write such threatening letters, but he says that in September, 1904, he changed his mind, when he wrote a letter to Robert H. McCarter, Attorney General of the State of New Jersey, in which he said, "Unless official action is taken in my case I will kill Vroom."

Shortly afterward he wrote identical letters to each member of the board of managers of the New Jersey State Hospital for the Insane at Trenton to the effect that he would kill Judge Vroom unless before April 6, 1905, the board would do one of three things, namely: "1. Apply to the New York courts to have him confined in an insane asylum of the State of New York; 2. Formally discharge him from the New Jersey State Hospital for the Insane, at Trenton; 3. Resign from the management of the New Jersey State Hospital, at Trenton."

This letter was brought to the attention of the authorities in New York City by one of the trustees, and prior to April 6, 1905, the Relator was arrested and an application was made by the

board of charities to have him committed to a hospital as an insane person.

He demanded a hearing and that was the hearing before Referee Nealis, which has been referred to.

These proceedings were prosecuted by the corporation counsel's office of New York City and seem to have been conducted very thoroughly, and the Relator given every opportunity to show his sanity.

While the proceedings were pending before the referee, the Relator was detained at the psychopathic ward of Bellevue Hospital in the care and under the observation of Dr. Menas S. Gregory, a resident alienist in the psychopathic yard of said hospital.

He testified his opinion that the Relator was a paranoiac and even since that time the Relator seems to have been of the belief that he had entered into the conspiracy against him, and Dr. Gregory from that time on was the victim of many scurrilous and abusive and threatening letters from the Relator.

Among other doctors called as to the mental soundness or unsoundness of the Relator upon this hearing before the referee was Dr. John J. Quigley, who testified that he was a paranoiac.

Dr. Quigley was appointed by Mr. Justice McCall before whom the proceedings were pending, and because the Relator learned that Dr. Quigley was a brother-in-law of Judge McCall, both the judge and the doctor seemed to have been connected in his mind with the conspiracy from that time on.

Other doctors, both for and against the Relator's insanity, were called and examined in this proceeding, and many people and associates who had had business or personal relations with the Relator and who testified as to his sane and rational conduct in the ordinary business and personal relations of life were called in his behalf.

The hearing seems to have been very thorough and very fair to the Relator, but on all the testimony, including his own long examination, the referee reported that he was insane and he was committed to the Manhattan State Hospital on Ward's Island on or about May 13, 1905.

There he was in charge of Dr. Lewis C. Petit, who had had eighteen years' experience there with the insane, and who testified before the commission that Relator was a sufferer from paranoia.

The Relator has claimed that his commitment to that hospital was illegal for the reason that it was not within ten days after the examination by the two doctors necessary for commitment, but he ignores the fact that during all this time the examination on his own application was going on before Referee Nealis.

For the first ten days or so he behaved himself very nicely there, but after that he became violent and was put in the violent ward.

On August 16, 1905, he escaped from the Manhattan State Hospital and went to Boston. He worked there for five or six weeks and returned to New York City and went to work for the Holland Iron Works as their estimator, and continued in their employ or in other employment at his business until on April 11, 1907, when he was arrested and sent to Bellevue Hospital, remained a few days, was discharged and was immediately rearrested and taken to the Tombs and indicted for sending the threatening letter to Governor Stokes of New Jersey.

During the time intervening between his escape from the Manhattan State Hospital and his commitment to the Matteawan State Hospital, while he was for the most time employed at his business he behaved himself in his business relations and in his personal relations with people who had had no connection with the alleged conspiracy against him in a sane and rational manner, but apparently he could not seem to desist from writing scurrilous and threatening letters to those whom he imagined to be responsible for his business troubles or those who had testified against him or had been responsible for his detention in the New Jersey State Hospital and the Manhattan State Hospital.

The letter threatening to kill Governor Stokes was the culmination. It is as follows:

NEW YORK, March 25, 1907.

Hon. Edward C. Stokes, Governor of State of New Jersey.

SIR: It would do me no good to kill Garret D. W. Vroom. I do not enjoy having lost all my property, my home, my wife and my children but I can get more property, another home, another wife and more children. What I cannot endure is that you keep me classed with those unutterable things you have penned up in your State Insane Asylums. There is a way to remove that stigma. None of the unutterable things you have penned up can kill you. I will kill you. Then the grafters headed by Vroom will be just as anxious to make it appear I am sane, so that I will be electrocuted and out of their way for all time, as they are now anxious to make it appear I am insane.

This notice is like my commitment to your State Insane Asylum—there is no time limit to it. If I do not get you before your term of office as Governor expires, I will get you afterward. I live but for one thing; *i. e.* to have the stigma of insanity removed. You know the facts. You can give me justice and you will not do it. You are responsible. You will die. Then I will die but I will die as I have lived—a sane man—and everybody will know that I died sane because I will have proven that I have more sense than you, who with all your power cannot prevent me from killing you. I am greater than all the Judges in New Jersey; you can pardon any one they sentence to death—but before my decree you are powerless.

God alone can stop me. He may stop me—but you will do well in being prepared to meet Him. You will get no more letters from me.

Respectfully,

WM. J. LEE.

On this history, based upon all the evidence given before the commission as well as the testimony taken before Referee Nealis on the former proceeding, Dr. Stern testified before the commission and gave his opinion that the Relator was sane; he reiterated this belief and testified to the same opinion, basing it mainly on the same facts in his testimony before me.

I am forced to the conclusion by a careful reading of all this testimony, both that before Referee Nealis in 1905, and that before the commission in 1907, which resulted in the Relator's present commitment, that the judgment of Dr. Stern is not sound and that his opinion is a mistaken one.

His opinion is at variance with an overwhelming preponderance of contrary proof by eminent specialists and alienists who had testified to the insanity of the Relator in these two proceedings; and the facts themselves as testified to by the Relator himself and by other witnesses, and uncontradicted, or rather admitted by him, the facts proven in the case before the referee and before the commissioners on the two hearings, the very facts upon which Dr. Stern based his conclusion of sanity of the Relator, without the aid of any expert or medical testimony, inevitably lead to a directly opposite conclusion, that the Relator was insane at the time stated, and therefore I am forced to give no weight whatever to the opinion testimony of Dr. Stern before me that the Relator is at present sane.

I may say incidentally that Dr. Stern did not pretend to be a specialist in insanity, but qualified only as a general practitioner

of large experience, which included of course experience in nervous diseases.

Opposed to Dr. Stern there were called as expert witnesses before me on behalf of the defendant, Dr. Albert Warren Ferris, president of the State commission in lunacy, Dr. William L. Russell, medical inspector for the State commission in lunacy and Dr. Amos T. Baker, first assistant physician at the Matteawan State Hospital, who has had the Relator in charge and under his observation since his commitment to the asylum up to the present time.

Dr. Albert Warren Ferris testified that he had personally examined the Relator, but from that personal examination he could not yet conclusively decide that he was afflicted with paranoia, but in answer to a hypothetical question based upon the history of the case of the Relator as set forth in the case book of the Matteawan State Hospital which was received in evidence, he did state positively that in his opinion the Relator was a paranoiac, provided he had enough business acumen to know the nature of the transaction of real estate in which he attempted to enter and the matter was explained to him in full after his failure to acquire it.

Dr. Baker both from the history of the case and from his personal observation and examination of the Relator during his confinement in the Matteawan State Hospital was definitely and positively of the opinion that he was a paranoiac.

Dr. Russell agreed also with the opinions expressed by Drs. Ferris and Baker.

While the opinions of neither Dr. Ferris nor Dr. Russell would be satisfactorily conclusive without further evidence, Dr. Baker's opinion, which seems to have been conscientiously and intelligently formed, not only from the history of the Relator's case but also from his personal observation of the Relator while confined in the Matteawan Hospital, seems worthy of great consideration and respect.

The reasons given on the various hearings, before Referee Nealis and again before the commission and before me, by the Relator for making the threats to kill, and for writing these scurrilous, abusive and threatening letters, were to call attention to the manner in which he had been wrongfully deprived of his

property, as he claimed, and in order that he might establish his sanity. He claims that he broke the glass of the Trenton Trust and Safe Deposit Company with a brick so that upon the trial for the misdemeanor his bankbook and bank account should be introduced in evidence and investigated and the methods of the bank and of the men who had control of the bank be exposed.

A man of the intelligence and education and experience of Relator should have known that the only issue on his trial for the malicious mischief in breaking the glass was whether he did it purposely or not, and that his relations with the bank and the bank's methods of doing business would be absolutely immaterial to the issue and could not appear in evidence on the trial.

The motives of the Relator with regard to the scurrilous and abusive letters and the threatening letter concerning Judge Vroom and the newspaper articles inspired by him, were claimed by him to be his desire to have an adjudication in the State of New York as to his sanity.

This adjudication was had in the hearing before Referee Nealis and his commitment to the Manhattan State Hospital by Judge McCall was the result.

In the hearing before Referee Nealis, the Relator had stated that he was convinced that the sending of abusive and scurrilous and threatening letters was a mistake, and that he would not do so any more; but after his escape from the Manhattan State Hospital, instead of endeavoring to prove his sanity by sane and rational conduct, he again proceeds to write more of his scurrilous and abusive letters, finally writing the alarmingly threatening letter to Governor Stokes.

Instead of pursuing a sane course by which in a short time he could have established his sanity to the satisfaction of everyone, he resorts to the conduct which he had already testified he thought was foolish, adding to the already long list of his alleged persecutors, others who had been guilty in his mind of helping to adjudge him insane in New York wrongfully.

In his testimony before me the Relator repudiates any intention of carrying out his threats or putting them into execution, and as evidence of this he states that before the threatening letter was received by Governor Stokes, a copy of it sent to the New York *Herald* had been published.

The Relator testified before me that his only purpose in sending the threatening letter to Governor Stokes was that he might be arrested, tried and convicted of a misdemeanor, and having served the sentence for the same he would then appear before the world as a sane man.

That such an irrational reason should be seriously advanced for his criminal conduct in sending the threatening letter is consistent only with the general irrationality of Relator's conduct since his troubles began in 1902.

Certainly no man of sound sense and of the general intelligence of the Relator could sanely expect any such result from his violent actions that the Relator says he anticipated and was therefore moved to act in the irrational manner that he did.

Before me the Relator testified that he had been advised by counsel that he had no legal right to the Phœnix Iron Works and that therefore he had resolved to give up any expectation of ever getting back those works.

If the Relator could stick to this resolution and absolutely give up his apparent delusion with reference to his rights in the Phœnix Iron Works and the alleged conspiracy by which he was deprived of them, the history of the case shows that he would undoubtedly still retain the delusion of persecution by all who have been concerned in his incarceration in the various asylums where he has been a patient.

It is, however, quite evident that it would be as impossible for him to ignore and set aside his imagined grievance with reference to the Phœnix Iron Works as it was for him to keep his resolve to write no more threatening letters which he made at the time of the examination before Referee Nealis.

The appearance of the Relator upon the stand before me was extremely favorable to the hypothesis of his sanity up to the point in each instance where he was asked to give a sane reason for his many irrational acts that had been testified to against him or admitted by him.

He is a man of more than common ability, more than the average intelligence, well informed beyond the ordinary, with an acute mind and a bright sense of humor.

Even his great handicap of extreme deafness was no apparent obstacle to his being an excellent witness in his own behalf.

However, after the account of his life for the last six years, as given by himself on the stand before me, and on the history of the case as it appeared on the examination of his own expert witness Dr. Stern, and from the testimony of the expert witnesses called before me, the testimony of Dr. Baker as to his conduct in the Matteawan State Hospital, together with his opinion and the opinions of Doctors Ferris and Russell that he is suffering from paranoia, I am forced to the conviction that he still is of unsound mind and that it would be dangerous both to himself and to the community for him to be released from the restraint of his commitment to the Matteawan State Hospital.

His conduct there recently has been that of a violent irrational insane man. He has been violent and noisy at night time on different occasions, and has threatened to put a bullet through the black heart of Dr. Baker, and to dispose of him as Thaw did with his tormentor.

When asked about this threat he admitted it and his attempts at excuse were silly, inconsequential and irrational.

When taken to New York from the Matteawan State Hospital pursuant to a writ of habeas corpus obtained in his behalf, he became violent and struggled and fought with his attendants and the doctor accompanying him at one of the stations in New York City, and called upon a policeman to arrest them.

It is to be noticed in the history of his case that he ran away from the Trenton Asylum a few days before Chancellor Reed was to give his decision in habeas corpus proceedings pending before him.

During his detention at the Matteawan Hospital he has continued to write scurrilous, abusive and threatening letters, samples of which were offered in evidence before me.[1] One dated November 15, 1907, to Wm. Travers Jerome, district attorney of New York, as follows:

DEAR SIR:—Two hundred and twelve (212) days ago, your office had me indicted on a charge of misdemeanor. Subsequent events justify me in stating that your office procured that indictment in bad faith and that the purpose was to cause my incarceration without a trial in this State Prison for Insane Criminals which is poorly disguised under the name of "State Hospital." Here is the supreme law of the land, any tricks

[1] But a few of the letters quoted are here reproduced.

by your office, or by the cowardly, lying curs who conduct this prison, to the contrary notwithstanding: "In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial by an impartial jury." You are hereby notified that unless you bring me to trial, I shall prefer charges against you and request the Governor to remove you.

One dated December 2, 1907, to "Robert Brockway Lamb, Alleged Medical Superintendent, Matteawan State Hospital," as follows:

Despised Ass and Moral, of not Legal, Murderer:

"But man, proud man,
Dressed in a little brief authority,
Most ignorant of what he's most assured,
His glassy essence, like an angry ape,
Plays such fantastic tricks before high Heaven." (Shakespeare.)

Mabon will probably be allowed to wriggle out of it by pleading the baby act but you and Baker are going to be "caught with the goods on you" with no excuse but "Gregory said so"—and that will not save you, or Gregory either.

"Lord, what fools these mortals be!" (Shakespeare.)

Yours Contemptuously,

WM. J. LEE.

P. S.—Shortly after I came here, "attendant" Hugh Ward, one of your choice collection of brutes from Wappingers Falls boasted that here they killed people like me. Now, my dear nephew of that notorious brute, Brockway, I cordially invite you to try killing me.

One dated December 3, 1907, addressed to Honorable Judge O'Sullivan, General Sessions Court, New York, N. Y., as follows:

YOUR HONOR: On July 1, you committed me to this institution. Dr. A. T. Baker has charge of me and Dr. A. T. Baker is an habitual liar. Detective Flood, employed by the District Attorney of New York County and instructed by Assistant District Attorney Krotel, told Magistrate House that I escaped from the Ward's Island Insane Asylum in the middle of winter and swam the East River through floating ice. It was proved that I was set at liberty by the Ward's Island people in the middle of summer; that I went away in a boat; that I had been incarcerated on Ward's Island as a victim of "paranoia" a form of insanity which is invariably progressive and incurable; and that the Ward's Island authorities had formally discharged me as "improved"; therefore, two things were proven: 1. There are liars connected with the District Attorney of New York County. 2. I am not a victim of "paranoia." Yesterday, the liar, Dr. A. T. Baker, told me two things: 1. That I am a victim of "Paranoia." 2. That on Nov. 19, he had gone

to the office of the District Attorney of New York County and then and there learned that I had threatened to kill Justice McCall of the New York Supreme Court. I never threatened to kill Justice McCall, therefore two things follow: 1. It is impossible for me to determine whether the liar, Dr. A. T. Baker, or the liars connected with the District Attorney of New York County invented that lie. 2. It is impossible that the liar, Dr. A. T. Baker and the liars connected with the District Attorney of New York are in collusion. An unconvicted sane man should not be kept incarcerated with insane criminals simply because liars are in charge of the Matteawan State Hospital. I understand the nature of the charge against me. I am indicted for having violated section 559 of the Penal Code, the specific charge being that I wrote a letter threatening to kill the Hon. Edward C. Stokes, Governor of the State of New Jersey. That is a misdemeanor and if I am guilty I am liable to imprisonment for one year or a fine of $500 or both. My counsel are Lewis Stuyvesant Chanler and Lorlys Elton Rogers, both of whom are reputable gentlemen with offices at No. 346 Broadway, New York City. I have paid to these gentlemen $350 and I expect to pay them more. The reputation of these gentlemen justifies me in saying that they would not take my money to defend me if I were not able to advise with them in that defense. Under the Constitution of the United States and the laws of the State of New York, I am entitled to a speedy and public trial by an impartial jury. I respectfully request you to grant me my right.

One dated December 8, 1907, addressed to his counsel, Lorlys Elton Rogers, as follows:

My Dear Mr. Rogers: I have heard nothing from you since I received your letter of Nov. 21, in which you said you would write again in a few days. I have now been "treated" in this "hospital" for one hundred and twenty-one (121) days, during all of which time I have not been ill for one minute or received one drop of medicine. For their kindness in refraining from "doping" me I thank the "hospital" authorities who have "treated" me as follows: For twelve hours out of every twenty-four I am locked in a dark cell in solitary confinement; that's half my life. Twice every day I am forced into a room with about 80 maniacs and compelled to indecently expose my person. Three times a day I am forced to eat in company with about 250 maniacs and—perhaps with a view to shortening my painful contemplation of the manners at table of these maniacs—the time allowed for eating is about one third the time I generally take. I am not only deprived of my customary daily bath but the order of the State Commission in Lunacy to bathe all "patients" at least twice a week is deliberately violated. The rest of the time I spend in hearing Dr. Baker tell me that I am an incurable lunatic at his mercy as long as I live; in dodging fights with lunatics; in witnessing the punching, kicking, "hanging," maiming and murdering of lunatics; in hearing "attendants" make orations to me somewhat as follows: "You blankety, blankety, blank son of a ——, we will kick

—— out of you, we kill people like you here," etc., etc. Insane asylum "attendants" many of whom are ex-convicts and fugitives from justice—do *not* "treat patients with respect and kindness" and they do *not* avoid rudeness and violence of every kind," instructions by the State Commission in Lunacy to the contrary notwithstanding. This scientific and humane "treatment" has "cured" my insanity. My mind has become so clear that I perfectly understand the nature of the charge against me and I am able to advise with you in my defense. My "concealed delusions" remain "concealed" so effectually that I defy all the Matteawan doctors to find 'em.

Please get a writ of habeas corpus and have me taken from this "hospital" where I am treated like a mad dog and taken to the "Tombs" where I am treated like a man.

One dated December 26, 1907, addressed to Dr. Albert Warren Ferris, President of State Commission in Lunacy, Albany, N. Y., as follows:

DEAR SIR: I have thought over the question you asked me, namely: "Why does not your (my) lawyer do his duty? My lawyer has done his duty. Why should my lawyer now do what the State of New York pays Dr. Albert Warren Ferris $7500 per annum to do, *i. e.*, make Robert B. Lamb, M. D., do his duty? If you will read the "Insanity Law" of the State of New York, and you really should read it—you will find that the State Commission in Lunacy is "charged with the execution of the law." Here is the supreme law of the land which you are charged to execute: "In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial by an impartial jury." The fact that the District Attorney of New York County gets a case that he does not want to try and himself asks for a lunacy commission and has the "accused" sent to this State Prison for insane criminals without a trial by jury does not make lawful the prolonged imprisonment here of the "accused." Let all the "insanity experts" in existence call me the craziest man on earth; unless a jury believes them and renders a verdict accordingly, I am not legally insane. Has your experience in the Thaw case taught you nothing? The fact that hundreds of others have been unlawfully imprisoned here does not make my imprisonment here lawful. They have boasted that they killed people like me here but that does not give them any right to kill me. You cannot give any valid reason why they are allowed to kill any one here. You cannot give any valid reason why you allow Robert B. Lamb, M. D., to deprive me of constitutional right to a trial by jury. The District Attorney of New York County is either a fool or a knave. I can not be responsible and irresponsible at the same time. If I was responsible for writing a letter threatening to kill one Edward C. Stokes, I should have been sent to the Penitentiary; if I was irresponsible, my counsel should have pleaded irresponsibility. You are hereby notified that I am under indictment in New York County, charged with having threatened to kill one Edward Stokes; that the

statute makes the maximum punishment for such misdemeanor imprisonment for one year or a fine of $500 or both; that I can not be lawfully sentenced before a jury finds me guilty; that I am able to advise with counsel and want to be tried by jury; that Robert B. Lamb, M. D., is depriving me of my right to a trial by jury; that the law makes you responsible for Lamb's actions after I have notified you; that unless I am forthwith sent to the New York City Prison, I shall bring a suit against you for damages sustained by me by reason of my imprisonment in the "Matteawan State Hospital," an institution apparently maintained by the State of New York for the purpose of violating the laws of the State of New York

One dated December 30, 1907, addressed to Hon. Charles E. Hughes, Governor of State of New York, Albany, N. Y., as follows:

SIR:

"This too I know—and wise it were
If each could know the same—
That every prison men have built
Is built with bricks of shame,
And bound with bars lest Christ should see
How men their brothers maim.

With bars they blur the gracious moon
And blind the goodly sun;
And they do well to hide their hell
For in it things are done
That Son of God nor Son of Man
Ever should look upon."

Let the perjurers who conduct this hell do their best—or worst—I will soon be out of their clutches. Will you come here now and let me prove to you the iniquity of the moral lepers in charge of the "Matteawan State Hospital"—or will you in the end tell your God why you allowed things "that Son of God nor Son of Man ever should look upon"?

One dated January 2, 1908, addressed to his counsel, Lorlys Elton Rogers, Esq., as follows:

MY DEAR MR. ROGERS: Leslie has given his copy of the minutes of the Lunacy Commission to the moral lepers in charge of this hell—moral leper Baker has shown it to me. These moral lepers also asked the moral lepers in charge of the Trenton hell for their statement and got it. Is is evident that unfair methods are again to be used against me. To block their game, I sent a letter to Dr. Ferris on Dec. 20—enclosed in a copy of that letter. Instead of getting a writ of habeas corpus for me, please bring at once a suit against Dr. Albert Warren Ferris for damages sustained by me by being deprived of my Constitutional right to a trial by jury. If you think it advisable, make Jerome also a defendant.

The Thaw trial and the fact that prominent newspapers are openly calling the President of the United States a lunatic—only yesterday the "New York Times" referred to his "delusion of persecution"—show how utterly useless it is to argue about any one's sanity; but there is no getting around the fact that "In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial by an impartial jury."

I am a sane man and I will stay in this hell ten years if necessary to expose the moral lepers in charge here.

One dated January 5, 1908, addressed to Dr. Albert Warren Ferris, President of State Commission in Lunacy, Albany, N. Y., as follows:

DEAR SIR: In accordance with notice, I have instructed my attorney to bring a suit against you. Please understand that I have no personal feeling toward you nor have I any delusion that you are persecuting me. Before I was sent to Matteawan, I utilized four separate opportunities to study the workings of insane asylums. That experience together with about five months of observation here has convinced me that Robert B. Lamb, M. D., and his principal assistant A. T. Baker, are moral lepers.

I deem it my duty to have said Lamb and Baker removed from their positions if I can possibly do so and I bring a suit against you because I think that is the most practicable method to accomplish my purpose. I do not anticipate that I will recover a great sum of money and I do anticipate that I will be subjected to hardship and possibly to death at the hands of cowardly assassins but the Almighty has given me an exceptional opportunity to expose unnecessary evils practiced upon helpless human beings and I will expose those evils and also ultimately prove that I have never been insane or I will die still trying to do it.

One dated January 22, 1908, addressed to Hon. C. V. Collins, Sup't of State Prisons, Albany, N. Y., as follows:

DEAR SIR: I have read with interest your address delivered in Baltimore, Md., on the 16th inst. "Until political influence gives way to merit and fitness in the appointment of prison officers a high standard of prison management cannot be reached." Who appointed Robert B. Lamb as superintendent at Matteawan? Why is a convicted felon in Sing Sing treated better than I who have never been tried and am only accused of having committed a misdemeanor? No individual cup and lather brush for me? No effort to effect my reformation and return me to society better, and with a higher conception of my own moral obligations. What I get is the statement that I am at their mercy as long as I live. No effort to improve my mind. Solitary confinement in a dark cell for 12 hours every day and refusal to give me employment to occupy my mind for the other 12 hours is what I get. Tell me who keeps Robert B. Lamb as superintendent at Matteawan and I will tell you who thwarts "the wise judgment and earnest co-operation of our honored Governor, Charles E. Hughes."

One dated February 2, 1908, addressed to Robert B. Lamb, M. D., as follows:

DEAR SIR: Your preposterous assistant, A. T. Baker, is fond of calling me "irrational." In the English language, the words "irrational," "foolish," "absurd" and "preposterous" are synonymous. Webster's International Dictionary is my authority for stating that of these four words, "irrational" is weakest, "foolish" rises higher; "absurd" still higher; "preposterous" still higher and supposses an absolute inversion in the order of things, or in plain terms, a "putting of the cart before the horse." I reiterate that your assistant, A. T. Baker, is preposterous. "Irrational" means "not rational; void of reason or understanding; as brutes are irrational animals"; therefore I tell you that your assistant A. T. Baker, is worse than a brute. However, my simply telling you that your assistant, A. T. Baker, is worse than a brute does not prove that said Baker is worse than a brute. You are hereby notified that I am to be taken before a court of justice on a writ of habeas corpus; that you will be subpœnæd to produce this letter before said court; that Frederick Schmidt will be subpœnæd to produce his ear in evidence before said court; that sane men imprisoned here will also be subpœnæd to appear before said court; and that I will prove that I am not irrational by the simple process of proving that your assistant, A. T. Baker, is worse than a brute.

Paranoia is described by the expert doctors and by the text-books on insanity as a disease of insanity where the victim has systematized delusions of persecution. The systematized delusions are apparent in the history of the case of the Relator.

Paranoia is a progressive disease, and a careful study of the history of Relator for the last six years shows the progress of the disease in his case.

The doctors are united in saying that the victim of paranoia is usually guilty of the conduct of which Relator has been guilty, of sending abusive, scurrilous and threatening letters, and of being violent and of attacking those in whose charge and custody the patient for the time being is. These facts appear in the case of Relator.

The doctors say that the paranoiac often has a basis of heredity for his disease.

The fact that the Relator's father was insane for six or seven years between his sixtieth and seventieth year to the time of his death is consistent with this observed fact.

The history of paranoia shows that its victims are dangerous

and surely one who threatened with death men of prominence in the country who have had none but an accidental connection with him or an incidental connection with his affairs, of no materiality, is a dangerous man to be at large with an opportunity to carry out these threats.

The symptoms generally observed in the case of the paranoiac, of the grandiose feeling of the victim, is quite apparent in the case of the Relator.

He evidently has exaggerated to the extreme limit the importance of himself and his own affairs to the extent that he has refused to be governed by the ordinary rules of life and of conduct, and demands unusual and exceptional attention to his troubles and grievances.

From the records of the other proceedings I doubt whether any man has had more conscientious, thorough, painstaking examinations as to his sanity than has the Relator.

I have given a most careful consideration to his case as it was presented before me, and I am forced to the same conclusion arrived at in all the other proceedings, that the Relator is of unsound mind.

I therefore decide and order that the writ be dismissed and that the Relator be remanded to the custody of the Matteawan State Hospital for the Insane.

MARCH 6, 1908.

Notes and Comment.

THE "REPORT ON METHODS OF FISCAL CONTROL OF STATE INSTITUTIONS"[1] made by Henry C. Wright, and published by The State Charities Aid Association of New York, is an exceedingly interesting document of 350 pages, giving in detail the methods employed to ascertain the financial results attending the management of state institutions by a central board of control or a purchasing agency.

The spirit of candor and fairness towards all parties manifested in the general plan of the report, and through each step in the work, ranks it above the grade of criticism, and the conservative conclusions formulated give it great value, and insure its due influence in future considerations of public policy.

The painstaking methods of examination followed in considering the various subjects will serve as models for similar investigations and suggest the proper course to be taken by hospital officials who desire to possess something more than a superficial knowledge of their personal operations.

The large sum total expended from public funds for the support of the insane, the criminal and the dependent classes has naturally attracted great interest, and leaders of public opinion and prominent politicians have given much thought to this matter and to the possibilities of more economical management. Without doubt the consolidation of similar enterprises and the massing of interests in the business world have favored a reduction in the cost of management, and prominent men of affairs have argued that the same business methods applied to state institutions would greatly benefit the state finances.

But the suggested analogy between business concerns and hospital units is evidently faulty, since Mr. Wright conclusively

[1] Report of an Investigation of the Method of Fiscal Control of State Institutions. Part I, New York. Part II, Comparison of the States of New York, Indiana and Ohio. Made for the State Charities Aid Association. Publication No. 122. By Henry C. Wright. Introduction by Homer Folks. New York: United Charities Building, 1911.

demonstrates that the more complete and rigid the central control over state institutions the greater the resulting discomfiture of institution officials; and he also shows that when the cost of such central control is included in the cost of maintenance, instead of economy, increased cost of hospital management is the rule. His examination of public institution expenses has been so thorough and has covered such wide and varied fields of practice, his results cannot be lightly regarded.

The public institutions of New York are grouped by law under three classes, state hospitals, state prisons, and state charitable institutions, and each department has its special system of central control. But the attitude assumed towards the institutions and the business methods pursued by these three separate central bureaus vary each from the others; hence Mr. Wright was able to study their activities as inauguarated from different view-points and to institute comparisons of these several methods as they worked out in a single state. Moreover, to give additional weight and authority to his conclusions, he compares the financial operations of the New York institutions with those of state institutions in Iowa, managed by a central board of control, and in Indiana, where the financial affairs of each hospital are managed by local officials.

It appears from the investigation in New York that the chief aim of the most autocratic system was to make a good showing by purchasing supplies of inferior quality at reduced prices.

Such is the logical outcome of concentrating in the hands of a central official or commission the authority and responsibility for state-wide purchases. It is the only practical scheme by which a central purchasing agency can make a showing for efficiency and the annual reports are certain to present these suggestive figures even if they actually represent false economy.

Legislation authorizing such large financial transactions will always prescribe methods to be followed and establish a system of rules to regulate the practice and guard against irregularities and fraud.

While such legal limitations of independent action on the part of the purchasing agent are no doubt proper and perhaps necessary, they restrict the scope of business operations and forbid the employment of those methods which economical buyers must adopt.

Economy in purchasing hospital supplies should not be expected where the "advance estimate" and "open bid" features are imperative; and this statement applies to independent hospital management as fully as to the central purchasing agency.

It may be accepted as a law that the burden upon taxpayers will increase as institution purchases are hedged about with iron-clad conditions. When the specifications for goods required are minutely exacting and the contracts embody drastic penalties for deficiencies, the bidder must protect his personal interests by submitting bids which conceal a reasonable premium for insurance against loss from hypercritical inspection, delayed payments, litigation, etc.

Merchants intending to conduct their business honestly have to rely upon the integrity and judgment of agents and other dealers and should be paid for the risks of captious inspection which occasionally may be very unjust. Mr. Wright commends the scheme of specifications for hospital supplies which the controlling central authorities adopted, but he criticises the general neglect of proper inspection of goods when delivered, as he finds in very many instances that the goods are inferior to contract requirements.

And yet this condition is the natural consequence of a system where the local receivers are out of reach of and out of sympathy with the contracting official. Then, too, the contracting official fully understands that prices will be raised in future bids when discarded supplies go back to the dealers and may not desire too rigid inspection.

Economy never has been considered in making contracts by the general government. The government demands exactly what its descriptions call for and expects to pay at least a liberal price for everything obtained.

Whenever the individual states adopt the U. S. system of purchasing supplies and require formidable contracts with penal clauses, they effectually rule economy out of state hospital management. Mr. Wright discovered that the wholesale prices of commodities required by a single hospital were practically as low as they were for larger orders calculated to supply a whole group of institutions. This appears to be true concerning flour, beef, coal, etc. He notes the fact that one institution purchased

coal directly from a mine, but could discover no evidence of economy in the transaction.

He also learned that measures which produced good results at one institution were inefficient or unduly expensive when forced upon other institutions.

Such evidence aids in confirming the theory that special conditions appertain to each institution which must be considered and should be cultivated, when economies are to be effected.

Unless directing or supervising commissions grant the state institutions sufficient freedom so that each can develop special characteristics in organization or management which are aptly described as its "individuality" and allow the superintendent or purchasing steward considerable freedom of business action, economy of administration cannot be expected. In order to purchase supplies with discrimination, the buyer must be able to oversee the issue of rations and note the facts regarding the consumption of all forms of hospital supplies. With many things the quality of an article rather than the price decides the question of the economy of its purchase.

Then there are pretty regular periods in the year when certain standard articles always required by institutions can be purchased in the open market at tempting concessions in price. Under such conditions the shrewd institution buyer always secures a large stock for future use. He watches the crop reports and market conditions, for example, to determine the best time for acquiring an extra stock of flour. The local purchasing agent must be well qualified to judge the intrinsic value and true merit of the things he has to buy. He must also keep in close communication with wholesale concerns in the nearest business centres.

By such methods he will frequently have opportunities to secure exceptional bargains. Some large dealer may unexpectedly find himself overstocked in some line of produce, or he may be called upon to raise a large sum of money upon short notice; under such circumstances he may offer a large consignment of staple goods much below the market price, provided prompt payment is guaranteed.

It is by taking advantage of such opportunities that independent hospital buyers have in the past practiced economy in state hospitals. When the superintendent is forbidden to accumulate

stock for months in advance of consumption and must proceed methodically purchasing only what has been specified in advance estimates, and such things only after competitive bids have been submitted, he is entirely out of the bargain market.

And when there are no available funds upon which he can draw to pay for purchases made at such irregular times without upsetting a complicated system of official sanction, the economical disbursement of hospital funds is vetoed in advance.

The local carelessness in issuing food-stuffs and ward supplies from the hospital storeroom, and the indifferent inspection of incoming material which Mr. Wright's investigations uncovered in institutions where central control prevails, may be regarded as practical consequences of that system. When the superintendent and steward find themselves helpless and thankless agents of a distant but overshadowing bureaucracy, it is little wonder that their interest in little details wanes and their vigilance relaxes.

And this condition of affairs suggests another result of the central system of control, unfortunate so far as the true interests of the state are concerned. It sacrifices the advantages which result from having at each public institution a practical school for daily instruction in wise hospital management. It undermines local initiative and displaces those conditions which most stimulate ambition and endeavor along lines of practical hospital economy.

Mr. Wright observes that "the constructive possibilities of a central system of control have been little realized in the administration of New York institutions." As a matter of fact the present laws do not favor constructive development. It is only as the importance of cultivating these hospital units is recognized, and the cooperation of the local officials is encouraged, that a constructive system of hospital management becomes feasible. Mr. Wright's suggestion of a modified system of central control where less central authority is exercised, and a more judicious central board of supervision is substituted, is wise and timely.

He expresses surprise because the central-control schemes, while standardizing institution supplies, cost prices, etc., have failed to systematize consumption of food material, permitting wide per capita variations in different institutions caring for the same class of inmates.

His chapter upon food consumption should awaken directing and supervising authorities to the possibilities of economy in this field. In recent years state legislatures have enacted so many laws which virtually restrict the eçonomical administration of state hospitals, that freedom to act with such objects in view is almost limited to attempts to regulate institution dietetics and secure greater economy there. The food calories provided in most hospitals are found to be excessive when the conditions and needs of the inmates are taken into consideration. Better kitchen methods, more intelligent labor in preparing food, a higher degree of art, French culinary art, and a cutting down of waste, are problems which can be solved when sufficient thought and labor are properly applied. Mr. Wright is entitled to the gratitude of all hospital managers for his practical report upon methods of hospital control. CHAS. W. PAGE.

OCCUPATIONS FOR NURSES AND ATTENDANTS IN INSTITUTIONS FOR THE INSANE.—We are gratified to observe that the Chicago School for Civics and Philanthropy announces in a circular a course for institution nurses in occupations for the chronic insane. These are to consist as before of handicrafts and various forms of exercise and play, and are intended especially for actual attendants in institutions for the insane or mentally defective, and also for those who desire to fit themselves for such positions.

We notice that the course of study and training promised is essentially the same as was offered last year. We had hoped that an effort would be made to furnish handicrafts which would appeal to the patient, and would stimulate him to effort by enabling him to create something with which he is familiar, and which might be of use to him upon his recovery.

To offer to an uncultured agricultural laborer an opportunity for "paper and cardboard instruction; modeling in Plastina clay; lessons in color; braiding; knotting in twine; raffia and tilo; work in crashes; weaving mats, baskets, etc.," may interest a few patients, for the most part women.

The patient, it is true, we are informed, may also learn bookbinding, or to make "copper lamp shades, brass candle shades," or may shape "metal bowls," or manufacture "simple silver jewelry," or may learn to "tool leather," make "card cases,"

" chatelaine bags," or " corners for blotting-pad mates," but these schoolgirl occupations would not seem calculated to interest the average chronic patient of any class. Cannot something be devised which will furnish greater human interest?

The course outlined seems to have been imported from a handicraft shop, and primarily devised to furnish light and genteel employment for decayed gentlewomen, who are not able to work, but are willing to make articles of no particular use, to sell at extravagant prices.

We would suggest that an effort be made to devise a course adapted to the chronic insane, taking into consideration their previous tastes and capacities.

The same criticism may be made of the forms of exercise for work and play, such as " national " dancing, " æsthetic " dancing, and " social " dancing, " floor work in free-hand exercises, the use of the usual apparatus of the gymnasium or field houses, and participation in indoor gymnastic games." Such forms of work and play would not seem to exhaust all the devices for the occupation of patients. They may suffice for patients in a small private institution, who only " play " at work or play, but they are ludicrously unsuitable for the rank and file in the ordinary state institution, filled with chronic patients of the laboring class.

Many of the occupations mentioned above, to the ordinary uncultured patient, would not be recreative but rather meaningless and puzzling. Classes in light carpentry, in pottery, in the cultivation of flowers, and in out-of-door games, would seem much better suited to the recreation and development of these patients than the semi-genteel accomplishments at present announced.

These suggestions are not made in any spirit of ungenerous criticism, but rather from the feeling that occupations for the chronic insane should be developed by those familiar with their needs and not exclusively by those who have given thought and time to handicraft shops and the needs of small, private institutions.

Book Reviews.

Feeblemindedness in Children of School Age, with *Reference to its Characteristics, Recognition, Causation and Remedies.* By C. PAGET LAPAGE, M. D., M. R. C. P., Physician to the Manchester Children's Hospital, Pendlebury; Lecturer in School Hygiene and the Observation of Children to the Manchester University. With an Appendix on Treatment and Training. By MARY DENDY, M. A., Honorary Secretary to the Lancashire and Cheshire Society for the Permanent Cure of the Feebleminded. (Manchester: At the University Press; New York: Longmans, Green & Co., 1911.)

The University of Manchester, England, places the world in its debt by the publication from time to time of monographs upon various topics of investigation undertaken under its auspices. The scientific value of these contributions is large, and many are so conceived as to be of popular interest, at any rate are well adapted for the educated class of general readers. There are now in print an "Anatomical Series," a "Biological Series," a "Celtic Series," a "Classical Series," an "Economic Series," an "Educational Series," an "English Series," an "Historical Series," a "Medical Series," a "Physical Series," a "Public Health Series," and a "Teleological Series," besides a number of unclassified lectures, essays, catalogues, criticisms and facsimiles.

Among the latest volumes of this collection, rich in substance as in quantity, is that by Dr. C. Paget Lapage upon "Feeblemindedness in Children of School Age."

The purposes of this book are stated in the preface to be: (1) To emphasize the importance of the subject of mental deficiency and of the prominent place that efficient care of feebleminded persons should take in the measures for the welfare of the community; (2) to point out that feeblemindedness is an inherited taint handed on from generation to generation, and (3) to demonstrate that the only way to deal effectively with the problem is to provide suitable supervision and care, which will last during the whole life time of the feebleminded individual, and to show how such care may best be administered.

To accomplish the purposes set forth in the preface the authors have refrained from technical phraseology, in so far as is possible in the treatment of a more or less technical subject, and have brought before the thinking public a dispassionate and statistical resumé of the menace of feeblemindedness. They point to the lack of systematic or intellingent care and recourse to expediency in the isolation of the individual case, so that feebleminded persons, either from patent disability to live discreetly among their neighbors, or from excesses incident upon neglect

grafted upon inherent frailty, are variously dealt with according to a law which ignores the substratum of inefficiency and punishes its results. Imbeciles and idiots, representing classes with palpable defect, are easily recognized, and asylums are provided for their care. The feebleminded person, on the other hand, is "one who is capable of earning a living under favorable circumstances, but is incapable (a) of competing on equal terms with his normal fellows; or (b) of managing himself or his affairs with ordinary prudence." These children number approximately, in England and Wales, about one per cent of the population of school-age, and for three-fourths of these no provision has been made. It is further estimated that more than ten per cent of prisoners are mentally defective, and the recently appointed Royal Commission outlines the careers of these neglected persons in a sad commentary upon the administration of the criminal law: "From the earliest age, when they appear before the magistrates as children on remand or as juvenile offenders until and throughout the adult period of their lives, the mentally defective, at first reprimanded and returned to their parents, then convicted and subjected to a short sentence and returned to their parents, and then later continually sentenced and re-sentenced and returned to their parents and friends till for crimes of greater gravity they pass to the convict prisons, are treated, as this reiterated evidence shows, without hope and without purpose, and in such a way as to allow them to become habitual delinquents of the worst type and to propagate a progeny which may become criminal like themselves."

In another group are the habitual inebriates, over sixty per cent of whom were found by the Commission to be mentally defective.

It is plain, from this, that little has been done in the line of treatment and its correlative prophylaxis. The capacity of the feebleminded individual for self-support has not been tried out. Two important considerations are presented for study: First, the prevention of habits tending to degeneracy, and, second, the development of a system of care and industrial occupation suited to the mental resources of the individual. That this may be accomplished may be accepted as a fact, for the defective is as susceptible to the benefits and happiness of right living as his more completely endowed brother. He is often driven into distress and crime when he might as easily be led into the successful attainment of some limited ambition of life. Only one element is needed: A superior intellect to supply the defects; that is, a guardianship which protects him from the evil consequences of his own judgment, and from the unbending severity which rules the action of all who meet upon the same terms in the struggle of independent existence.

This principle is crystalized by the authors of this book in these concise conclusions:

(1) That all persons, who are really incapable of earning their living when left to their own devices, should receive from the state such special protection as may be suited to their needs.

(2) That the community should be protected from the harm that may be done by allowing feebleminded persons to be free to follow their own in-

clinations or to come under the control of ignorant or unscrupulous individuals.

(3) That the different circumstances and different needs of the various cases necessitate the provision of different methods suitable to the several types of case and not the provision of any one fixed method.

(4) That such cases should be dealt with primarily on the ground of their mental defect and not, as hitherto, on the ground of their poverty, their violence or their crime.

In view of the high ground taken by the authors and the close determination of principles, both of organization and treatment, some surprise may be felt by the reader who comes unexpectedly upon the discussion of "asexualization." But the prominence of this topic in the socities of England and America may justify its admittance into the book. To many its advocates hardly seem in earnest, and yet laws for the practice in one or two states have been enacted. One wonders how they will be put in effect and who will carry them out. But the authors mention the practice only to condemn it. It has its origin in the deplorable condition of the neglected feebleminded. Under proper environment these children may be reclaimed, at any rate to a standard of cleanly and decent living. For this life-long care and supervision are essential, legal powers should be given, suitable institutions provided, intermarriage prohibited, and teachers and other workers trained.

The book by Dr. Lapage and Miss Dendy is not only an exposition of these principles but a study of the problems presented by the feebleminded. Measures of treatment, education, discipline and training are detailed. Such questions are presented at one time or another to every practising physician and are to often, under present conditions, incapable of solution. The state must first meet this situation, then agitation for farm colonies for habitual drunkards, tramps and other incompetents will cease, for these classes may be expected to disappear only when the root of the evil is reached, and the victims are treated, in the words of Dr. Lapage, "on the ground of their mental defect, and not on the ground of their poverty, their violence or their crime."

Seventh Biennial Report of the Board of Control of State Institutions of Iowa. For the biennial period ending June 30, 1910. (Des Moines: Emory H. English, State Printer, 1910.)

This volume contains 721 pages including the index and is divided into two parts. The first contains chapters on general observations, farms and gardens, water supply, fire protection and losses by fire and storm, insane and epileptic, tuberculosis and the state sanitarium, health of inmates and employees, legislation recommended, appropriations, visitations of institutions, salaries, etc.

The second part is divided into two divisions, the first dealing with institutional population, the second, with finance of institutions. The report is an excellent one and there is a wealth of detail gathered in it which is fortunately so well arranged that reference may be conveniently made. We

find that during the biennial period 1876 patients were admitted, an increase of 66 per year as compared with 86 per year during the previous period. It is stated that "The lessened ratio of increase is gratifying. In view of the fact that the population of the state has shown a slight decrease it would seem that there should be no increase in the insane population, but it must be remembered that when families leave the state they seldom take the insane members of their families with them. This, coupled with the fact that an increasing number of the aged, suffering from senile dementia, are sent to the institutions, accounts in part for the increase."

The average daily population of the four hospitals for insane during the biennial period was 4121, the total of all classes under care was 8725. Those discharged from the hospitals for insane during this period numbered 2127, and from all institutions 6982. Of the insane patients discharged, 95 were recovered, 18 improved, 15 unimproved, 741 died, 991 were paroled, and 157 escaped. Many other interesting details might be quoted did space permit. The Board is to be congratulated on having adopted a very rational classification of mental diseases which it is hoped will come into general use.

W. R. D.

Abstracts and Extracts.

Etats mixtes de la psychose Maniaque dépressive. La manie coléreuse et ses différentes formes. Par H. Nouët et L. Trèpsat. Journal de Neurologie, An. 15, p. 41. 5 Fevrier, 1910.

This mixed form is characterized by the existence in the same subject of depression, temper, flight of ideas, and restlessness. The maniacal symptoms are most prominent but those suffering with this form are maniacally sad rather than in a happy humor. The patients are ordinarily irritable, morose, become angry for the most trivial reasons, complain constantly, and their chief enjoyment is making disagreeable speeches and trying to injure others. Insomnia is frequently present.

Irascible mania is divided into three forms, the first of which shows changes in disposition. The patients are morose, sullen, and slightly talkative. They regard their questioners with an angry look but do not speak spontaneously and are quite often quiet. Motor agitation is generally not marked, but the patients may remain seated in the same place for the greater part of the day without making any movement. They may become excited and make threatening speech and movements but show little flight of ideas. To this form is given the name hypothymic.

The second form is called ideative and here the patients are sad, sullen, but show an extreme logorrhœa. The dominant symptom is the flight of ideas. The associations are usually by sound rather than by ideas. Many delusions may be present, those of persecution and grandeur being the most common.

In the third form the motor symptoms are most prominent and is hence called the motor form. The patients are dull and morose. The flight of ideas is not marked, but the motor agitation is extremely violent and accompanied by cries and incoordinated gestures.

Three case abstracts are then given somewhat fully and attention is called to the fact that delusions of persecution are a prominent symptom in each case. They are, however, especially changeable, superficial, and entirely lacking in systematization. The irritable humor sufficiently explains why delusions of persecution are more prominent than others.

W. R. D.

La stomatite ulcerativa contagiosa nei malati di mente. Pel Dott. Michele Angelillo. Annali di Nevrologia. Anno XXVIII, p. 381.

This is a report of an epidemic of ulcerative contagious stomatitis which occurred in the Manicomio di Aversa, in which 11 cases suffered, 9 of whom were subjected to bacteriologic investigation. All of these showed a pseudodiphtheric bacillus, associated with one or more of the following:

Staphylococcus aureus, staphylococcus albus, diplococcus of Fränkel, streptococcus, a fusiform bacillus, and a spirillum. Four of the cases died and all showed pulmonary lesions. Cultures of the pseudodiphtheric bacillus to determine its pathogenic power gave negative results.

The lesion usually appeared on the lip and adjacent gum, rarely in other parts of the mouth. The part became red, swollen, soft, and painful. There was a fibrinous exudate which coagulated forming a grayish-white membrane which adhered quite firmly and when forcibly detatched was followed by a slight hemorrhage.

Treatment and prophylaxis consisted of the use of weak carbolic solutions. W. R. D.

Psychoses séniles et préséniles dans le diabète. Par MM. HALBERSTADT et ARSIMOLES. Revue de Psychiatrie. Tome XV, p. 46. Fevrier, 1911.

The diabetic psychoses have been frequently discussed but authors differ in their interpretation. Recently, the relationship between diabetes and the paretic syndrome has been studied. Regis has advanced the idea that mental troubles in diabetes are autotoxic, while other writers claim that they occur especially in the aged and do not differ from the mental disturbances due to involution and arteriosclerosis.

Among the disturbances met with are those which have been grouped by Regis as elementary and which may be depression and inhibition or, more rarely, an irritability. These are undoubtedly psychasthenic, and both senility and arteriosclerosis may have an influence on their origin.

In the psychoses proper we may have a series of toxic states: First, the diabetic coma; then the precomatous states. Also the narcolepsies, including states of confusion, and ***delire onirique***.

Also there may be a simple coincidence of diabetes and mental disturbances, and we must be careful not to confuse a true diabetes and a simple nervous glycosuria.

It is extremely difficult to be positive as to the etiological importance of diabetes, and even when present that it is the sole cause of the mental symptoms. Bouchardat has observed that diabetics becoming insane are frequently alcoholic, and arteriosclerosis undoubtedly plays an important rôle. Of 42 cases reported by different authors all but 3 were over 45 years of age, their ages being 26, 40, and 32. Kraepelin attaches considerable importance to this factor of age, and other writers also believe that involution may bring about changes in the nervous system which are increased by the diabetes.

The authors believe that two forms exist of diabetic insanity which they illustrate by abstracts of their own and others' cases. In the first there may be a state of depression, with hypochondriac ideas, delusions of persecution and of ruin, anxiety and frequently suicidal attempts.

The second form belongs in the category of pseudo-paretics, of which a case was reported by Laudenheimer in 1897, and a second by Ingegnieros in 1906, these being the only two known, although two doubtful cases reported by Frerichs and by Sommer are included.

If it is conceded that elementary psychic symptoms (changes of character, etc.) may be attributed to diabetes, then we may say that there are three groups of cases grouped according to their varying relationship with diabetes.

1. Cases in which the relationship is purely coincidental in which all forms of mental diseases may be seen.

2. Autotoxic cases of diabetic etiology.

3. The forms described as diabetic psychoses which are not included in the above. Here the rôle of diabetes can not always be positively affirmed. The age of the patient, which is that of involution, and various other causes which may occur in the same patient (especially alcohol and arteriosclerosis), we believe bring about presenile or senile psychoses. In the etiology, always complex, diabetes does nothing more than exert its well known action on the development of arteriosclerosis and senescence.

W. R. D.

L'judice opsonico in alcuni malati di mente. Nota preliminare dei dottori Mario Baccelli e Tullio Turni. Rivista di Patologia nervosa e mentale. Vol. XVI, p. 24. Gennaio, 1911.

The work of Wright and Douglas in 1903 led to the development of the reaction known to clinicians as the "opsonic index." This has been obtained in 38 patients of whom 20 were epileptics, and 18 were cases of dementia precox. In the cases of dementia precox examined the opsonic index of the blood showed slight variations about the normal. In the epileptics the opsonic index showed during the period remote from the attacks, a noteworthy increase.

W. R. D.